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ORIGINAL LECTURES.

IRITIS.

A Clinical Lecture delivered at the Central Dispensary, Washington, D. C.

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(Reported for THE MEDICAL NEWS.)

GENTLEMEN: The cases which we now present to the class, represent a form of eye disease which should be of great interest to you, from both a practical and a scientific standpoint. It demands your attention practically, because of its frequent occurrence and the disastrous results which usually follow it if not promptly recognized and energetically treated; while its scientific importance consists in the fact that we have represented in it all the forms of inflammatory action with which we have to deal, and that too in a position always open to inspection. In other words, the iris is a mirror in which we may see reflected all varieties of inflammation, except the distinctly mucous, from their beginning to their ending.

This is due to the position of the iris and its anatomical structure. Being at the bottom of the anterior chamber, and covered by the clear aqueous humor and transparent cornea, all alterations are readily detected; while in its substance we find all the tissues of the body except cartilage and bone. Muscular tissue is represented by the sphincter and dilator pupillæ; there is connective tissue, and an abundant supply of vascular and nervous elements. The epithelium on its anterior surface being a continuation of that of the posterior surface of the cornea, forms what is, to all intents and purposes, a serous membrane. Besides these, it has on its posterior surface pigment-cells, which bring it by continuity of tissue in immediate relation with the uveal tract in the posterior chamber of the eye, composed of the ciliary body (ciliary muscle and ciliary processes) and choroid. It thus becomes, as you see, a connecting link between the two chambers of the eye, and pathological alterations of each are likely to manifest themselves in it in some form or other, and, on the other hand, morbid changes in its tissue are liable to extend themselves in either or both directions.

From the standpoints of pathology and differential diagnosis, this is of immense advantage. It enables us to do that which I do not think can be done in any other portion of the body so readily; namely, make a precise nomenclature according to pathological products. We should, therefore, expect an inflammation of the iris to assume a purulent, or a plastic, or a serous form, and, as a matter of fact, we usually find iritis appearing under one or the other of these types, though it is by no means rare to have a mixture of two. We may have the plastic supervene on the serous, and sometimes some suppurative action is associated with the plastic, but it rarely or never happens that the serous and suppurative are combined in the same case. There is another form of exudation which is typical and distinct, the like of which has not been found, as far as I know, in any other organ, and that is what is known as the spongy exudation.

Basing, then, our nomenclature on the character of the inflammatory exudation we have: (1) *plastic iritis;* (2) *suppurative iritis;* (3) *serous iritis;* and (4) *spongy iritis.*

Making abstraction of hyperæmia of the iris, which is only the early stage of some form of iritic inflammation—but which oftentimes goes no further—you can class all forms of iritis under one of the above types.

Though these several forms have, in addition to their pathological exudations, some points in their clinical history which serve to distinguish them from each other, there are still some other features which they have in common, to which we will call your attention before we notice the individual types.

In the first place, among the subjective symptoms, we note *pain.* In all forms of iritic inflammation, except the serous, pain is a prominent and important symptom. It is that usually which drives the patient to the surgeon. If one has mere redness of the eyes, unaccompanied by acute pain, it is apt to be referred to a "cold," and professional advice is not sought; but, fortunately for our patients, pain is considered an alarming symptom, and the most intelligent of them at once call the attention of their medical attendant to their trouble. And just here we would call your attention to a very humiliating fact. In a much too large number of cases, unless the medical attendant has taken the pains to inform himself on these questions, the affection is still looked upon as a "cold," and, being considered a mere conjunctivitis, an astringent collyrium is ordered, and the treatment continued for days it may be, whereby much valuable time is lost. Now this is a mistake which should never occur, and no man should engage in a general practice where such cases are liable to fall under his care without being able to make a differential diagnosis between iritis and conjunctivitis. Any neglect in this matter is nothing short of criminal, and if you learn from this clinical course nothing else but to differentiate these two forms of inflammation, you will not have spent your time in vain.

You will remember that in our clinical lecture on conjunctivitis, I called your attention to the character of the discharge in making the diagnosis of this affection. Conjunctivitis being an inflammation of a mucous tissue, has a mucous or purulent exudation. During the stage of hyperæmia, it is true, this discharge may be scanty or absent, but during the state of inflammation proper there is always some mucous discharge. The amount varies from a quantity just sufficient to gum the lids together during the night's repose, to a drachm in the course of a few hours, as we have it in the purulent form. Even an experienced surgeon cannot always tell by the appearance of the conjunctiva whether there is a conjunctivitis associated with an episcleritis, as we find it in some forms of rheumatic ophthalmia, or a mild iritis, and even in some cases of iritis there is sufficient conjunctivitis to give a gumming of the lids on awakening in the morning. The characteristic discharge of iritis is watery. It is simply an increased flow of tears brought about by reflex action through the fifth pair of nerves.

The character of the pain is another point on which the diagnosis hinges. In conjunctivitis it is seldom acute, and assumes more a feeling of discomfort, and as if a foreign body was in the eye, is not as a rule paroxysmal, and is not disturbing at night. On the contrary, the pain in iritis, as each of the patients here present will tell you, is excruciating at times, though there may be periods of comparative repose. The pain too

is usually worse at night, and in the large majority of cases the exacerbations occur during the early hours of the morning. Moreover it is not usually limited to the eye, as is the case with conjunctivitis, but extends throughout the divisions of the fifth pair of nerves on that side. The pain is as often referred to the occipital branch of the fifth as to the frontal.

There is also more or less *photophobia*, or intolerance of light. It seldom or never, however, becomes so excessive as in corneal inflammation, and in some cases is entirely absent. In conjunctivitis, as a rule, unless the light is very intense and artificial, no special discomfort is felt.

In these cases of doubt, the safe rule for the general practitioner, who is not sure of his knowledge, is to instil a drop of a solution of sulphate of atropia into the affected eye. If it is a case of acute conjunctivitis, the atropia, on account of its anodyne properties, will do good, and if it is a case of commencing iritis, it is a strong blow at the enemy at the outset. If the pupil dilates *ad maximum*, leaving only a narrow black line of the iris visible at the circumference of the cornea, the absence of any serious inflammation of the iris can be considered as established. But if the pupil does not expand freely, and particularly if it is oval or irregular in outline, even if no adhesions are to be detected, it would be well to continue the atropia, for the probabilities are that you have to deal with a hyperæmic condition of the iris which may go on to a full-blown inflammation, and the great advantage you have gained in this dilatation of the pupil should not be lost.

We had an instance of this in the condition of the left eye of one of the patients, the colored man Ferguson, before you, as some of you may remember who saw him when he first came under observation four or five weeks ago. At that time there was considerable pain and watering of the eye, with the characteristic circum-corneal zone of redness. The pupil was still active, though less than normal, to the influence of light, and was altered but little in its appearance; in other words, all positive evidence on the part of the iris itself of pronounced inflammation was wanting. But the other manifestations, as well as an undoubted syphilitic history, convinced me that there was a hyperæmic condition which had not yet gone on to the stage of exudation. I therefore ordered a drop of a four-grain solution of atropia to be instilled into the eye three times daily. At his next visit the pupil was dilated, but not to its fullest possible extent, as would have been the case if it had been conjunctivitis, nor was it perfectly round, a somewhat larger bridge of iris showing at the upper outer corner. The syphilitic treatment, which had been previously ordered, and the atropia were continued. Nothing more was seen of him for three weeks, when he returned. He states that in a few days, under the treatment ordered, the pain and redness disappeared and the medicine was stopped. A few days ago, however, all the former symptoms reappeared suddenly and greatly increased in intensity, and when he presented himself an aggravated form of plastic iritis was evident at a glance. Undoubtedly hyperæmia of the iris can be occasionally aborted, as in this case, but the instances are, unfortunately, rare.

We will now take up the individual forms of iritic inflammation and point out the peculiar characteristics of each. As it is the form most commonly met with, I shall consider *Plastic Iritis* first. As its name indicates, the exudation in this form is plastic, and as a result we should expect adhesions between adjacent structures, and this we find to be the case. When the pupil is of normal size the posterior surface of the iris in its immediate vicinity lies against the anterior capsule of the lens. If now, plastic matter be thrown out from the inflamed iris, these two surfaces become adherent, the iris is bound down, and expansion of the pupil at that portion is impossible. If the whole circumference of the pupil is thus adherent, it will be immovable, even on the application of the strongest mydriatic. If, however, only a segment is bound down, a mydriatic will exert some, though it may be not a full, influence on the remaining portion of the iris, and draw the edge of the pupil away from the centre. In this case the shape of the pupil will be irregular. If you take a lens of three inches focal distance, and concentrate the light from a lamp upon the pupil of an eye suffering from plastic iritis, as you see me do in the case—Ferguson—before us, you will note the outline of the pupil, instead of being round and regular, to have one or more reëntrant angles; and if you examine closely, you will see that the apex of each of these angles is a point of adhesion between the iris and capsule. In this case you observe two such adhesions, one at the upper outer angle and another at the lower outer angle. Moreover, if you examine the area of the pupil closely, you will see several small deposits of pigment on the surface of the capsule. These are caused by the pigment from the posterior surface of the iris which remained behind when the iris tissue was torn away from its adhesion by the force of the mydriatic. You will also notice a great change in the appearance of the iris. On comparing it with that of the other eye, you see that it has lost its brilliancy; it is dull and muddy in appearance, and is thickened and spongy-looking. Its radiating fibres are no longer to be seen as in the healthy eye. In this case you notice that the thickening is greater in some parts than in others, and occasionally you will find, as in the case of the soldier from the Soldiers' Home, which we showed some of you last week, a quite clearly circumscribed elevation not unlike a gumma, which, in the majority of cases, it really is. These alterations in the aspect of the iris are due to two causes: engorgement and infiltration of the iris tissue, and inflammatory exudation into the aqueous humor. In certain diffuse opacities of the cornea, the iris has the same muddy and lack-lustre appearance as in iritis, and I have known beginners in ophthalmology to confound the two; but if, when examining by the oblique light of the lens, you carefully note the appearance of the cornea, you need not fall into any such error.

In *Suppurative Iritis* the appearances of the iris are somewhat different. There is great swelling of the tissues, and there is a yellowish tinge to the whole, due to the purulent infiltration, and nearly always there is pus in the anterior chamber, which by the force of gravity falls to the bottom, forming what is known as a *hypopyon*. As there is always a greater or less amount of plastic matter thrown out, we may look for some adhesions, but the infiltration of the tissue is so general that the mydriatic seldom produces any effect.

In *Serous Iritis* we have a totally different set of symptoms and appearances. In this type there is little or no pain, and not usually any signs of acute inflammation, such as redness, photophobia, etc. Patients, as a rule, come for examination on account of defective vision only. A superficial inspection of such an eye does not usually offer any explanation of the complaint. It is here that examination by the oblique light, as you saw me make it in the case of Ferguson, is of essential service. On concentrating the light from the lamp by means of the three-inch lens, on the cornea and iris, you will find that the cornea, while almost perfectly clear for the greater part of its extent, is studded on its posterior surface over a certain area with fine dots like the dust of meal. This area is usually at the centre of the inferior part of the cornea. You will find a statement in the text-books to the effect that these dots are arranged in the form of a pyramid with its apex upward, and this form is accounted for by supposing the

greater quantity of the matter forming the dots has fallen by the action of gravity towards the bottom. According to my observation, this is by no means the rule. In a very large number of cases the affected area occupies the centre of the cornea, and is not pyramidal in shape, and you can quite frequently see a clear portion between the corneal periphery and the lower portion of the affected part. These dots vary in size from those which can be readily detected by the naked eye, to the most minute ones only visible by means of a magnifying glass. The iris tissue seen through the clearer parts of the cornea is but very little if at all altered, and the pupil, instead of being abnormally small, is, on the contrary, frequently somewhat dilated. The question now naturally arises why this should be called iritis at all. Formerly it was not. In some of the older text-books it was called *Descemitis* and *keratitis punctata*, but there is as little evidence of an inflammation of the cornea proper as of the iris. We seldom or never have an implication of any portion of the cornea except the membrane of Descemet. But we do sometimes have the deeper structures of the iris involved, though, as a rule, the morbid process is limited to the epithelium on the anterior surface, which is, as I have told you, continuous with that lining the posterior surface of the cornea. In fact this layer forms a continuous lining to the cavity of the anterior chamber, and when it is affected in one portion, it is likely to be affected in another. I am, therefore, not of those who look upon the dots on the membrane of Descemet as altogether deposits of inflammatory matter thrown out by the iris. The whole affection is a morbid process confined to the epithelium lining the aqueous cavity, embracing the cornea as well as the iris; and although some of the dots may be due to fibrin which has been deposited by the aqueous, much the larger number are due, in my opinion, to degenerative changes in the cells themselves. It has been called serous iritis because there seems to be an unquestionable increase in the liquids in the interior of the eye, as evidenced by an increase in the tension of the eyeball and of the depth of the anterior chamber in a very large number of instances. It is by no means infrequent to see a plastic form of iritis engraft itself on a serous. In such a case, you will have the signs and symptoms pointed out under that head.

The next form of iritis which I shall consider, I am enabled to illustrate with a case. It is rather rare, and was not described until within the last eleven years. I allude to *Spongy Iritis*. As its name implies, the exudation in this form is spongy, and it fills the whole of the anterior chamber. The appearance is quite peculiar and distinctive. The iris itself is almost obscured from sight, and a superficial glance might lead you to suppose a diffuse keratitis. The color is of a yellowish-gray, and in the early stages perfectly uniform, which is hardly ever the case in keratitis. It is, however, when the exudation is beginning to be absorbed, as it usually does in the course of a few days, that this character is most marked. The case before you, of Margaret G., a colored woman, aged 20 years, will show you this quite distinctly. On throwing the light from the lamp into the eye by means of the lens, you will see that the lower part of the anterior chamber is of a grayish-yellow color, and the iris is scarcely visible; you will notice, too, that the surface of the cornea is unaffected; you will observe at once a sharp line running across the cornea, about three mm. from the upper edge, and beyond this you see the iris quite clearly, and but little altered in structure. If I now cause the patient to look strongly downward and still keep the light concentrated on this portion of the cornea, you will see that this line marks the boundary of an exudation which occupies the depth of the lower portion of the anterior chamber from the iris to the cornea. The course followed by this exudation is quite regular, and the clinical history of such cases offers some typical deviations from the usual plastic form. In the first place, the pain in the earlier stages, before the exudation begins to be observed, is greater than we usually find it in the ordinary plastic form, and it is more continuous, having no periods of remission; but the cessation of pain, according to my observation, is almost instantaneous as soon as absorption begins. The manner of absorption, too, is peculiar. It begins at the circumference and progresses towards the centre from all sides, presenting always the sharply defined edges which I show you in this case. Such an appearance is very likely to lead to the supposition of a lens dislocated into the anterior chamber. The absorption progresses gradually, but with comparative rapidity, and usually in a week or ten days there only remains a small quantity of a gelatinous-looking material in the pupillary area.

The case before us is exceptional in so far as it is a woman, the only cases which have been reported in detail thus far being in males.

It sometimes appears under a typical form, and when the exudation is absorbed you find no adhesions. In Margaret G., however, it is associated with iritis plastica, and you can see behind the grayish exudation, if you look carefully, what I am sure is a gumma at the lower inner edge of the pupil.[1]

The character of this exudation is distinctly fibrinous in its early stages, but it seems to possess no tendency to organization and becomes wholly absorbed, first breaking down into a gelatinous mass.

But iritis, gentlemen, can be very properly and advantageously studied from another standpoint, namely, that of causation. We may have an etiological nosology, and its practical advantages are not to be overlooked. Considered in this light, experience has taught us that we may divide inflammations of the iris into the following classes:

1. Idiopathic iritis.
2. Syphilitic irits.
3. Rheumatic iritis.
4. Traumatic iritis.

Idiopathic iritis is of course only a form of expression to hide our ignorance of the cause of the inflammation. When we can find nothing to account for it, we say it is idiopathic, and genuine cases are probably rare.

The *syphilitic form* is, however, of frequent occurrence. The number of cases of syphilitic iritis probably outnumbers all the other varieties, even after we have eliminated those of doubtful character. It usually occurs under the plastic form, though the serous and spongy forms are by no means rare. It is, however, doubtful whether syphilitic iritis ever assumes a suppurative character. The tendency of the syphilitic lesion is more towards organization than pus formation.

Are there any characters, aside from a history of infection, which stamp an iritis as of specific origin? There are many who contend that there are. The point on which most stress is laid is the circumscribed character of the inflammation.

In syphilitic iritis, as in all other forms of specific inflammation, it is held, the tendency is to a strict circumscription of the pathological product. You will observe that in the papillary eruption on Ferguson's forehead, each papule is distinct, and however close two may be together, there is no appearance of their running into each other. While, therefore, not accepting this appearance as pathognomonic, it often serves as one point in a differential diagnosis, particularly be-

[1] After the exudation had been absorbed, as it was in a week from that time, the nodule and an extensive synechia were found. A clear history of syphilis was given.

tween syphilitic and *rheumatic* iritis. In the latter form I think it is seldom that there is such a restriction of inflammatory action to a particular portion of the iris tissue. You know the character of rheumatic inflammation in other parts of the body is diffuse, and it never becomes distinctly limited in outline.

As compared with the *rheumatic form*, syphilitic iritis is of short duration and comparatively easy to manage if seen sufficiently early. I know of no other internal inflammation of the eye in which the influence of proper treatment is so promptly manifest as in syphilitic iritis. In from five to fifteen days the force of the disease can usually be broken, while in rheumatic iritis sometimes weeks pass with no perceptible change, and in a large number of cases of the typical form the regulation "six weeks" go by before you can declare the patient convalescent; and in this form I think relapses are more frequent than in the others. I am convinced too that the pain in the rheumatic variety is more persistent and more severe than in any of the other forms.

You may have iritis occur at almost any stage of syphilis, though it is commonly reckoned among the secondary symptoms. I have seen it several years after infection, while again it may be the first prominent symptom to attract attention. In fact, it would never be well to conclude too hastily that a case is not of specific origin, even if there be no history pointing to syphilis. The old soldier from the Soldiers' Home, already alluded to is a case in point. As soon as I saw the nodule on the pupillary edge of the iris, I asked the assistant surgeon of the Home who had had him under observation for several weeks, if there were no symptoms of syphilis. He said the most thorough examination had failed to reveal any trace of past or present lesion of that nature. I advised him to continue his watch, for I was quite sure the nodule was a syphilitic gumma. Two weeks afterwards he informed me that typical mucous patches had made their appearance in the mouth.

I shall not speak separately of gonorrhœal iritis, because when we have iritis as an accompaniment of gonorrhœa, it is always associated with the rheumatism which we sometimes find attendant upon urethral discharges.

Traumatic iritis, more frequently than any of the other varieties, manifests itself under a purulent form, particularly when the wound is caused by the entrance of a foreign body. You will remember the case of the colored man from the country, admitted to the house some two weeks ago, who had, when we saw him only two days after the injury, a pronounced purulent iritis. The foreign body (a piece of steel from a hoe) must have been very small, for the wound in the cornea was discoverable only by oblique illumination, and the injury to the iris seemed to have been proportionately small. There was already pus in the anterior chamber, forming a hypopyon, and the iris tissue was swollen and of a yellowish tinge. With a view (though without much hope) of checking the progress of the inflammation, we opened the anterior chamber, let out the pus, and excised the wounded portion of the iris. It was of no avail, however, for the next morning the lids were swollen hard and tense, and there were all the signs of panophthalmitis. The case went on to atrophy of the globe, and a few days ago we enucleated it, because it was still painful, and the other eye began to show signs of irritation. In this case the inflammation travelled back to the ciliary body and choroid, and the foreign body, which was still in the interior of the eye, no doubt added greatly to the virulence of the inflammation.

As a rule iritis is unilateral, though both eyes are liable to be affected in time. I have not observed that the prognosis is worse in the colored than in the white race.

TREATMENT.—The first object in the treatment of iritis is to obtain the widest possible dilatation of the pupil and maintain it. It is above all things important to prevent adhesions between the iris and capsule, and this is much more likely to occur when the pupil remains contracted. In the first place, when the pupil is dilated, the iris is removed further from the capsule, making adhesion more unlikely; and, in the second place, the area to be filled with inflammatory exudation is largely increased, and the danger of occlusion of the pupil is correspondingly reduced. This dilatation of the pupil is best obtained by instilling into the eye every six hours a solution of sulphate of atropia of the strength of four grains to the ounce of water. The atropia being an anodyne, also acts as a calmative to the pain. It acts, too, directly on the inflammatory process, for in dilatation of the pupil the iris tissue is compressed and of course holds less blood, and as a consequence the exudative process is in a greater or less degree checked. All other treatment is secondary to this. When we see cases of iritis for the first time, the inflammation has usually made such headway that it is useless to attempt to cut it short; but when the pain is excessive and the inflammation of a distinctly sthenic type, local blood-letting is advisable. From three to six leeches to the temple or the artificial leech will often give immediate relief to these symptoms. But for the relief of pain the most reliable remedy is opium in some of its forms. It is often advisable to give the patient an opiate on going to bed—usually as late as ten or eleven o'clock, since the severest pain is commonly felt in the early morning. The opium not only subdues the pain, but acts beneficially on the course of the inflammation. After a full dose of the drug, the injection and photophobia are usually much less. As regards local applications for the relief of pain, nothing is better than warmth and moisture in some form. The most agreeable and convenient manner of its application is by means of a flannel bag about the size of the hand, filled with hops, which is immersed in water as hot as can be borne, and laid on the eye after it has been squeezed so as to expel all superfluous water. It was formerly the custom as soon as a diagnosis of iritis was made out, to begin the use of mercury, and push it rapidly to salivation. The pendulum then swung in the other direction, and there were those who found they could treat iritis, even of the specific form, without any mercury. The proper course lies between these two extremes. In rheumatic iritis mercury seems to exert but little influence on the course of the inflammation, but large doses of salicylate of sodium quite often make a profound impression on it, and in some cases may be expected to cut it short. But it must be given very heroically—as much as thirty grains every three hours until there are giddiness and singing in the ears. Where, however, there is reason to suspect syphilis, even though no positive proof of its existence may be furnished, mercury should be given. It need not be used, however, to the extent of immediate salivation. I am among those who believe that the action of mercury in syphilis is to assist nature in disposing of the excess of cellular elements to which the specific poison has led. This seems to be accomplished by a breaking down or fatty degeneration of the cells, with elimination by the various emunctories. In this process mercury undoubtedly aids, and I think the more effectually when given in moderate doses for a considerable time. Among our out-patients we generally use one-thirty-second to one-sixteenth of a grain of bichloride of mercury with two or three grains of iodide of potassium three times daily, after meals.

There is usually no necessity for confining the patient

to a dark-room. A modulation of the light is all that is requisite. Completely darkened chambers in eye inflammations are among the barbarities which have come down to us from the dark ages of ophthalmology. If all light is positively painful, then the bandage may be applied to exclude it, but we have no right to deprive the other portions of the body and the patient's attendants of the beneficent influence of that stimulant of nature so necessary for the mental and bodily well-being.

In the treatment of the serous form, where there is no pain and but little inflammation, the atropia, opium and other palliative measures may be dispensed with. Here our chief reliance must be on mercury, continued in small doses for a long time, as the course of the disease is usually very tedious, sometimes running over many months.

ORIGINAL ARTICLES.

PULSATING VASCULAR TUMOR OF ORBIT, EYELIDS, TEMPLE, AND FOREHEAD, TREATED BY ELECTROLYSIS.

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THOUGH the application of electrolysis in the treatment of vascular growths is by no means a new thing in surgery, and, although, it has had a somewhat extended trial in small vascular growths or nævi in the eyelids, its application in the treatment of large vascular tumors of the orbit or eyelids, or, in fact, any part of the body, has been limited. The following is, therefore, reported, not only on account of its rarity and the great size of the tumor, but also as demonstrating the advantages and disadvantages of employing electrolysis in the treatment of large vascular growths in the vicinity of the orbit and eyelids. The patient was a female child, who was admitted to the Nursery and Child's Hospital on the 19th of September, 1881, at which date she was twelve weeks old, and I first saw the child one week later. The following information was obtained from the mother: The family history was excellent on both sides. The father and mother are both living and apparently in robust health. The little patient was their first child, and was born at full term, after a very easy normal labor, on June 26, 1881, and has been nursed by the mother from her birth.

She has never had a day's illness, and sleeps quietly and soundly at night. On the second or third day, the mother does not exactly remember which, she noticed a spot about the size of a small nickel cent, half an inch above the centre of the left eyebrow, upon the forehead, and to the right of this, and near the median line, another of the same character, but smaller in size. These two spots were but very slightly or not at all elevated above the surrounding surface, were very *white* as compared with the surrounding skin, but there was no swelling or roughness of the skin noticeable. The child grew rapidly, but the spots remained unchanged for a period of three weeks, and nothing abnormal was noticed for the same period, when there appeared a slight discharge from the left eye, as if the child "had caught a cold in the eye," which was muco-purulent in character, as the eyelids were glued together at times. Though this was treated with astringent applications by a physician of the neighborhood, the eye did not improve and the discharge continued. About the same period, or three weeks after birth, a small, vivid red spot, as large as a pea, appeared upon the lower anterior surface of the right forearm, and has slowly increased in size. The upper eyelid now began to have a swollen appearance, and partially concealed the eyeball, and about this time the two spots began to grow red, not suddenly, but very gradually, and this was accompanied by an extension of the swelling from the eyelid upwards and forwards. During the next five weeks there was an occasional cloudy, watery discharge from the eyelids, and the swelling of the upper lid and supra-ciliary region became more prominent. The area of redness spread somewhat rapidly over the whole eyelid, upwards upon the forehead, and slightly upon the temple at the external commissure of the lids. During the three weeks preceding the child's entrance into the hospital, the tumor increased in size very rapidly upwards, outwards, and inwards towards the nose, as well as forwards, giving a marked prominence to the growth in the supra-orbital region, and to some extent filling the zygomatic and temporal fossæ. The mother also noticed that the child could not lift the upper lid, that the eye was pushed very decidedly forward, and was very limited in its motions. The area of redness was always progressive, but not to the same degree in all directions, the main extension having been upwards upon the forehead, "in two tongues," as the mother expressed it. It also gradually changed from a light-red or pinkish hue to a reddish-purple color.

When I first saw the child, she was a very marked example of perfect health in every particular, except the left eye and vicinity. A careful examination revealed the following condition of affairs. The swollen and purple eyelids projected almost directly forwards, in front of the plane of the orbit, in a mass as large as the two closed fists of the child, so that in a profile view of the face, it concealed the entire nose except the tip. The lower lid was entirely hidden from view by the overhanging upper lid, which was pushed downward much below the level of the lower orbital margin, and about on a plane with the junction of the nasal cartilages with the naso-buccal furrow. The swelling extended over the entire upper lid, upon the bridge of the nose, and encroached upon the right side of the nose and nasal end of the right eyebrow. The child's forehead was rather prominent, and the swelling extended well above the frontal bosses. The growth also filled the entire zygomatic fossa and nearly the entire temporal fossa, extending backwards to the anterior edge of the concha. Most of the swollen region in the lid and on the forehead was of a livid red or purple, but the inner or nasal end of the lid was much lighter in color, and the temporal region was scarcely discolored. From the supra-ciliary region there extended up-

wards two irregularly shaped tongues well towards the line of the hairy scalp, which were much brighter in color, and resembled strongly in appearance the ordinary vascular nævus. The ciliary margin of the lid, while almost purple in color, was but little swollen, and there exuded from beneath it a thin, muco-purulent discharge. The skin over the swollen region was tense except at one point, the most prominent of all, which was situated over the line of the superior orbital margin, and at the union of the middle and inner thirds of the lid. Here the skin fluctuated on pressure and was evidently very thin.

Careful examination showed that the main swelling was in the subcutaneous tissue of the lid and eyebrow and in the orbital cellular tissue, while the skin itself was the seat of a pure nævus. The growth in the zygomatic and temporal fossæ, though yielding slightly to pressure, was firm and dense, but the swelling in the lids and orbit yielded markedly to pressure, and a few moments' compression with the fingers directly backwards towards the apex of the orbit sufficed to diminish the size of the tumor by from one-half to two-thirds. The moment, however, that the fingers were removed, the swelling reappeared as before. On lifting the upper lid, the eyeball was seen to be pushed downwards and inwards toward the nose, but there was little protrusion of the eye beyond the normal plane of the orbital opening, showing that the orbital part of the growth did not extend deeply into the orbit, but rather occupied its upper and outer portions, and this latter fact could be recognized by introducing the finger beneath the upper lid at the external canthus. The eye was limited in motion in all directions, but especially upwards and outwards. The media and membranes were perfectly normal, the iris reacted naturally, and an ophthalmoscopic examination showed a normal nerve and retina with no change or interference in the pupillary circulation. Close observation of the summit of the growth discovered a slight pulsation visible to the eye, and this became more distinct to the fingers when a slight pressure was made upon the tumor.

The thinning of the skin over the summit of the tumor and its easy indentation at this point, convinced the writer that there was a cavity of some size in this region, which probably was entirely outside of the orbital cavity, and was filled with blood; and that therefore the tumor was of a mixed nature, cavernous as well as teleangiectatic, in this resembling so many vascular tumors not only of the lids but of other parts of the body. A vessel as large as a large goose-quill could be felt under the skin, at the external angle of the lids, and could be traced a short distance towards the temple, and another one, somewhat less in size, was felt running across the bridge of the nose and connecting with the angular artery on the right side; this was distinctly an artery, as it pulsated under the finger. Pressure upon one or both of these vessels made no difference in the swelling. Pressure upon one or both carotids produced no effect on the size of the tumor, even when kept up for some time, but it stopped all pulsation. At no time was there any murmur or bruit noticeable over the tumor or vicinity. The child was very restless during this long examination and cried persistently, but became quiet immediately when left undisturbed. Some bleeding from beneath the eyelids followed, but it was slight in character and ceased in half an hour.

Another point determined by the examination was that the pressure of the tumor had produced an absorption of the underlying bone in at least two places; for just over the supra-orbital margin, in a line with the point of exit of the supra-orbital nerve, was a distinct excavation in the bone into which the point of the finger could be introduced, and at the external angle of the orbital margin was another and larger excavation. The skin over that portion of the tumor occupied by the two tongues before mentioned was corrugated both to the sight and touch, and all over the growth, in detached spots, there was a well-marked superficial arborescent vascularity. The nævus upon the fore-arm was about the size of a silver ten-cent piece, with elevated surface and sharply defined outline. There were no other marks anywhere else upon the child's body.

A consultation was held by all the members of the attending and consulting staff, all the gentlemen but one agreeing in their opinions as to the nature of the tumor, but differing somewhat as to what ought to be done. One of the gentlemen, however, differed from the opinion of his colleagues that it was a mixed teleangiectatic and cavernous growth, and thought that it might be malignant in character. The methods proposed for the relief of the child were, with one exception, of the same nature, and differed only in detail. The first thing to do was to cut off the blood supply in one of several ways. The majority were in favor of ligating the left common carotid in the usual way. Another suggestion was to tie both the external and internal carotid arteries on the left side. Still another was to ligate both common carotid arteries, because the tumor extended somewhat beyond the median line, and evidently drew some of its vascular supply from the vessels on the right side of the face, and also because of the possible internal anastomosis within the orbital cavity through the medium of the ethmoidal vessels. This

proposition was abandoned, because it left the supply of blood to the head to be carried on only through the medium of the vertebral arteries, and in an infant these vessels are very small and probably of insufficient size for the nourishment of the parts. It was thought that the left common carotid artery at least should be tied, as a preliminary step, and that afterwards, in case there was but little diminution in the size of the tumor, an operation might be undertaken for ligating any smaller vessels around the base or outskirts of the mass.

It was the opinion of most of the gentlemen who saw the case that electrolysis was not to be thought of as a primary or preliminary operation, owing to the extreme size of the tumor, and also to the probability that it was a mixed cavernous and teleangiectatic growth; but that after the carotid artery had been tied, and the child recovered from the operation, electrolysis might be essayed as a further help in bringing about coagulation and diminishing the size of the tumor. From all these opinions the writer ventured to dissent. He was of the opinion that the child was too young to allow of any hopes of a successful result from ligation of the common carotid artery, as death would probably ensue. The operation of ligating the nutrient vessels at the base or periphery of the tumor he thought too dangerous to be justifiable without previously tying the common carotid. He was strongly inclined to try electrolysis as a primary operation, as the least dangerous in the case, while it might produce at least a partial result in lessening the size of the tumor. It was finally decided to keep the child under observation in the hospital and await further developments, and to give the child five-drop doses of the fluid extract of ergot three times a day, as a possible means of controlling the circulation.

The child remained under observation until the end of December, and during the first month of this period the tumor slowly increased in size, and the skin over the palpebral portion seemed to grow thinner, but about the fifth week after the administration of the ergot had been begun, the growth seemed to stop and the tumor remained apparently stationary in size for several weeks, then it began to slowly diminish in prominence, and this continued until the end of December, when the mother was permitted to go home with the child upon condition that she would return immediately if any change for the worse appeared. During all this time the ergot had been constantly administered, and the mother was directed to continue its use at home.

The child was not seen again until the middle of March, 1882, at which time the tumor had again increased very much in size, and the anterior skin wall was extremely thin. The mother had neglected the ergot treatment, and there had been recently several small hemorrhages, which apparently came from beneath the surface of the lids, and frightened the mother very much. There was no change whatever in the child's general condition, and after a week's observation, it was not deemed advisable to postpone operative interference any longer. As at the first consultation, so now, the writer determined on electrolysis, as perfectly applicable to a soft growth which contained a decomposable liquid, whether arterial or venous, or both. It was thought that the decomposition of the blood and the accumulation of acids and alakalies at each of the poles, would bring about a chemical cauterization in the walls of the bloodvessels. This would probably aid in the disintegration and absorption of the tumor. There would be little or no danger from hemorrhage, as the coagulation would be instantaneous around the needle punctures, and the only danger to be feared would be a possible suppuration and abscess in the tumor, ending in perforation of its anterior wall. We know that this electrolytic action is most pronounced at the cathode, and that absorption is hastened by the chemical effects of the current and the mechanical and irritating effects of the needles, and that this may slowly continue for weeks. As a result, disintegration and atrophy take place, which continue for a long time after all electrolytic treatment has ceased. Another fact which inclined the writer strongly to electrolysis, lay in the knowledge that we have that an erectile tumor offers but little resistance to the passage of the galvanic current, and its tissue readily electrolyzes. Furthermore, in vascular tumors both poles of a galvanic battery may be made to operate simultaneously.

The first application of the electrolytic method was made on March 28, 1882, the child having previously been etherized. The battery first employed was a zinc-carbon Stöhrer battery; and on the principle that definite electro-chemical action may be excited when either one or both electrodes are broad flat disks, the first operation was done with the needle at the negative pole and a flat sponge disk at the positive pole. The needle was plunged through the skin into the tumor at the external angle of the orbit, and the sponge or positive pole was at first placed over the swelling in the temporal fossa. The current from two cells was then passed through the tumor, and, after one minute, increased to four cells, and after another minute to eight cells. At the end of the third minute the positive pole was removed from the temporal fossa and placed over the superior orbital margin, just covering the thinnest part of the tumor wall. The number of the cells was then gradually increased to sixteen, and after six minutes had elapsed from the time the current was first allowed to pass through, it was broken. A small nodule of condensation was felt around the negative pole, and the needle was withdrawn with some difficulty. Time, six minutes; current from sixteen cells. The child rapidly regained consciousness, and in less than ten minutes was laughing and crowing in its mother's arms. There was no perceptible change produced in the tumor by the operation. and no general rise of temperature or any untoward symptom in the general condition of the little patient.

On April 1st, the third day after, the second session was held. The child was etherized as before, and the needle or negative pole was inserted about half an inch from the previous point of in-

sertion, and just over the superior orbital margin. The positive pole or moist sponge disk was applied to the nasal end of the tumor, and a current from two cells was then passed. The number of cells was slowly increased to sixteen, and the positive pole was slowly moved about all over the inner or nasal half of the tumor. This second session lasted twelve minutes before the current was broken. As before, a quite marked nodule of condensation was felt at the negative pole, and the needle was removed with some little difficulty, and was followed by two or three drops of almost black blood. The child regained consciousness rapidly, and its general condition was apparently entirely unaffected either by the etherization or the operation, there being no rise of temperature or acceleration of the pulse. Time, twelve minutes; current from sixteen cells.

The third session was held on April 7th, six days later, and a different battery was employed, being a modification of the ordinary zinc-carbon battery by Spamer. The battery fluid used was composed of bichromate of potassium, 20 grammes; sulphuric acid, 45 grammes; sulphide of mercury, 2 grammes; and distilled water, 300 grammes. As electrolysis is produced most quickly and effectually when the current is made very dense by the use of small needles, it was determined to use small needles at both poles. The negative pole was introduced into the tumor on the nasal side, just at one side of the bridge of the nose and below the inner end of the eyebrow, and the positive pole was introduced on the temporal side near the external angle of the orbit, and just above it. As at the other sessions, the operation began with a current from two cells, and this was gradually increased to eighteen cells. The distance between the points of the needles was about half an inch as nearly as could be determined. Marked condensation occurred at the negative pole and a somewhat slighter hardening at the positive pole, but there was no perceptible diminution in the size of the tumor. Both needles were withdrawn with some difficulty, and their removal was followed by some slight bleeding. The superficial color of the tumor became decidedly paler, and this was also noticeable in the two tongue-shaped nævi, which ran up on the forehead, and lasted for a short time after the breaking of the current. Time, twelve minutes; current from eighteen cells.

The fourth session was held on April 11th, four days later. The negative pole was introduced just below and to the inside of the external canthus, and two needles were attached to the positive pole, one being introduced on the nasal side very near the point of entrance of the positive pole at the previous session, and the second being introduced through the lid lower down. A current from two cells was then passed, and this was somewhat rapidly increased in strength until twenty-two cells had been brought into the circuit. The two positive poles evidently entered a cavity, as they moved freely about, and could be made to rub against each other. The tumor blanched rather rapidly under this current, which was kept up unbroken for fifteen minutes. When the current was broken, the needles at the positive pole were removed without any difficulty, but the negative pole was removed with great difficulty, came out with a jerk, and was followed by some fluid blood, and a good deal of thick, disintegrated blood. Violent reaction followed, with marked increase in size of the tumor, a rise of temperature to 102¼° and pulse of 168, with vomiting, crying and constant restlessness, coming on in about five hours. There was marked and extensive condensation about all three needle-holes, and a perceptible diminution in the size of the tumor. The unpleasant symptoms disappeared on the following day, but the condensation remained and had increased, so that over a space included between the points of entrance of the needles the tumor was hard and firm, and pulsation had ceased. The area of condensation was about an inch and a quarter in diameter, and was of an elliptical shape. Owing to one of the needles having partially lost its insulating envelope, there was a small slough of the skin at its point of entrance, but this proved to be very superficial and there was no hemorrhage at this point. The hardening and condensation increased steadily as long as the child remained under observation, but unfortunately the father removed her from the hospital on the fifth day after the operation, contrary to the expressed wishes and direct orders of the writer.

In conclusion, I have to thank Dr. Chas. T. Poore, and Dr. Beverley Livingston, for the use of their batteries and their kind assistance at the operations, as well as Drs. Henry and Murray, of the House Staff of the Nursery and Child's Hospital.

JULY 26, 1882.

BLOWS ON THE ABDOMEN AND THEIR FATALITY.

BY WOOSTER BEACH, M.D.,
OF NEW YORK.

IN the NEWS of September 16th, are reported four cases of injury to the abdomen, of a severe nature, ending in recovery. Allow me to present a case with a fatal termination:

A young man about twenty years of age, while somewhat under the influence of liquor, created a disturbance in the street, for which he was arrested by a policeman. He became abusive to the officer and refused to be taken to the station-house. The assistance of three other policemen was secured, and the four seized the young man, two taking him by the arms, and two by the legs, carrying him, in this way, through the street. On the way, he was very noisy and struggled some, but was easily controlled, Suddenly, one of the policemen raised his club and struck him a blow, as near as could be ascertained, directly over the stomach. Instantly, he ceased his noise, his body became limp and powerless, and in this apparently lifeless condition, he was carried on to the station-house, a distance of less than a quarter of a mile. Arriving there, it was found that he was dead.

A post-mortem showed the body to be that of a well-developed, apparently healthy man. There were no external indications of violence, and after

a careful and exhaustive search of the entire body, absolutely no abnormal appearances could be discovered. I gave it as my opinion, before the coroner's jury, that death resulted from the blow. The policeman was tried, and convicted of manslaughter.

Because his cases ended in recovery, your contributor argues that blows on the epigastrium cannot produce sudden death.

While I confess to sharing in the doubt as to whether a fatal result can with positive certainty be traced to an injury of this kind, the first two cases reported, seem to me as tending rather to dispel the doubt, than to strengthen it. Had death quickly followed the receipt of the injury, probably no post-mortem changes would have been discernible. Now, who would say that in both these cases, the patients were not in great danger of dying? They suffered from *extreme* shock. Life was at so low an ebb that, for a time, it must have been very doubtful whether they would revive. Both recovered, it is true, but these cases seem to prove that, had the conditions been even slightly changed, the wounds would have resulted fatally. If the constitution of the patients, or the force or character of the blow, or perhaps the treatment, had been different, they might have died. And from these injuries we would not likely have post-mortem marks.

The latter two cases do not bear on the question, as the violence was so great in them that its effect would leave lesions plainly visible after death.

It cannot be claimed that it is the amount of violence to the abdomen that produces sudden death, as this is sometimes so great as to rupture a viscus, and without death immediately following. Shock more or less profound follows, but, as a rule, not sufficiently severe to cause death.

If it is true that a blow on the abdomen does cause death, it must be from some peculiar or unusual manner in which it is struck, or from it falling on some particular spot, or from some other unexplainable reason. It must be admitted that there are but few cases on record of sudden death from this cause, but this alone does not prove them to be uncommon. Cases of this kind would not likely reach a hospital, and its records would therefore show none. If attended by a physician, they would not likely be published, for the reasons that physicians generally do not publish their cases, and that those who do their duty better in this respect, would not be likely to report a case of a class not held to be exceptional by most surgical authorities.

Still, I cannot help agreeing with the writer of the article in the NEWS, that sudden death, following blows on the abdomen, happens very seldom. In an extensive experience in examinations of bodies for the coroner, I can recall no case except the one that I report. Unfortunately, most of my notes have been destroyed, and it is possible that cases escape my memory. I can, however, assert with a good deal of positiveness, that but this single case of a criminal nature has been investigated by me. Further, this rarity seems fairly proved by the fact that in the thousands of fights, beatings, and tussles, besides innumerable accidents almost constantly occurring, there cannot but be numerous instances where blows are inflicted on the abdomen, and, supposing the blow necessary to produce sudden death require ever so unusual or peculiar conditions, considering the vast number of blows given, not an insignificant percentage must perfectly fulfil these conditions. In the aggregate, these would constitute a large number of such deaths, and the knowledge of them could not escape finding its way to the profession.

Yet the well-authenticated evidences of death rapidly following blows over the epigastric region, must be explained in some way. They are usually attributed to their effect on the solar plexus. Without attempting fully to discuss this matter, I merely suggest, first, that it seems improbable that the solar plexus, so thoroughly protected by the soft and movable viscera, and the elastic gas in the stomach and intestines could receive a shock from a blow on the skin over it; and second, that those serious injuries that are sufficiently severe even to rupture abdominal organs do not communicate an impression on the solar plexus. At least, they do not as a rule cause sudden death. The "stroking" and "tapping" experiments of the German investigators should perhaps be considered, but I am not prepared to make an application of the results of their experiments to the solution of this question.

I have repeatedly called attention to a class of sudden deaths of which I find little or nothing in the books. An individual, apparently in perfect health, pursuing his ordinary avocation, with scarcely a moment's warning, sinks to the earth and dies, it might be said, instantaneously. Post-mortem examination conducted with the greatest care, reveals absolutely nothing to account for death. Instances of this mode of death are by no means uncommon. Occurring in private practice, and an autopsy being difficult to attain, the physician certifies to "heart disease" as the cause of death, a term which covers a multitude of sins—of omission. Persons dropping dead in the street, or under circumstances that may be thought suspicious are brought to the coroner's notice and their bodies are subjected to post-mortem examinations. To meet the possible objection that the autopsy in these cases has not been made with thoroughness, or with sufficient knowledge, or skill, I will say that in many of them, I have had the assistance of the best pathologists that our city affords.

Now, in view of the difficulty of finding any reason to explain these deaths following blows on the abdomen, and from the unfrequency of fatal results following such blows, I believe the assumption is entitled to consideration, that they should be classed with the sudden deaths that I have described, and that their occurrence directly after the blow, is a mere coincidence.

This subject is of decided importance in a medico-legal view, and I hope that its discussion may continue and not cease till it is definitely settled whether comparatively light blows on the epigastrium produce sudden death.

161 EAST FORTY-NINTH ST.

EPIDEMIC CATARRHAL FEVER.

BY FORDYCE GRINNELL, M.D.,
PHYSICIAN TO THE PINE RIDGE INDIAN AGENCY, DAKOTA.

A LATE epidemic of catarrhal fever occurring throughout these regions, presents some points of interest to which it may be well to refer.

But little attention seems to be given in medical literature to the consideration of this disease. Dr. Flint in his *Practice* devotes barely one page to its consideration, and yet it is one of our most widely extended and frequently recurring epidemics, and, furthermore, one seizure by the disease does not afford an immunity from further attacks. It is an ailment not infrequently attended with serious results. The writer since the beginning of his practice, ten years ago, has noted three wide-spread epidemics of the disease, has lost one of his nearest relatives by it, and has known of many deaths.

The beginning of the epidemic here was as sudden as is usually the onset of the disease "La Grippe." It seized with great suddenness, and hence has well been termed "lightning catarrh." The first cases developed about the 20th of March, almost simultaneously with the appearance of "epizoöty" or "pink-eye" among the horses. The first family to which I was called lived seven miles distant in Nebraska. The mother of this family was first taken with the disease, afterward the children, five in number, three boys and two girls, and then the father. All were severely affected and confined to the bed a part of the time. They considered their ailment simple "colds," and did not deem it necessary to send for a physician until the most serious symptoms manifested themselves in the third case, a boy 11 years of age. He had complained but little the previous day, was out of doors and playing with the other children much of the time, ate quite a hearty supper at night, and was dead before midnight. He was complaining, however, of pain in the throat, and was quite hoarse, as was his wont when he had a cold, so that his parents did not consider him dangerously ill four hours before death. The pain in the throat and sense of suffocation, however, increased to an alarming extent, and the boy died gasping for breath near midnight, and less than an hour after the messenger had been dispatched for me.

He had been dead nearly an hour when I arrived and, of course, I can not give a more minute description of symptoms. The family, however, had done all that intelligent nursing could do, and I do not think any of the physician's arts could have saved the patient.

His symptoms were very much like those of the other members of the family, only intensified. Afterward the others experienced the usual course of catarrhal fever, commencing chill, general feeling of malaise, and flashes of heat, alternating with chilly sensations. The temperature usually increased in the afternoon and evening, reaching at such times a temperature of 102°–103°. There was reddening of the mucous membranes of the respiratory organs, in many cases the congestion affecting the Eustachian tubes, and in some afterwards treated, producing intense pain in the ears, eventually resulting in a purulent discharge, especially with children and old people.

During the latter part of March I treated 17 cases (11 males and 6 females). In April I treated 192 cases (104 males and 88 females), and in May 48 cases (20 males and 28 females), or a total of 257 cases.

The nervous system in many of these was profoundly affected. Extreme prostration with some intense pain in the head. Sometimes the frontal sinuses were inflamed, and the seat of the pain located there, especially in those where the coryza was most marked. At other times the pain was of a neuralgic nature, or again pain was complained of in one-half of the head, as in migraine. As before referred to, earache was a prominent symptom with children and old people. We can, perhaps, account for this and the subsequent discharge of pus by the extreme congestion of the mucous membranes of the fauces and air-passages, extending into the Eustachian tubes, and thus pressing upon and affecting the membrana tympani.

Sharp, shooting pains in various parts of the body were not infrequently complained of. Those of the chest and side were apparently as severe as those of pleurisy, and increased on respiration. Aside from the usual flushing of the face, I noticed a peculiarity which I have since seen referred to by Dr. Da Costa in THE MEDICAL NEWS for May 20, viz., an irregular mottling of the skin of the face, neck, and breast. This was so marked in one case that the mother feared that scarlet fever or measles was about to supervene. Profuse perspiration quite frequently occurred, especially at night. Diarrhœa occurred in many cases.

The duration of the disease varied, the average being about one week, but many cases continued two or three weeks. One peculiarity of the disease is a tendency to relapse. After one is up and about, and feels comparatively well, a relapse is liable to occur, not, perhaps, including the same increased temperature, but with the same wandering pains, and general feeling of malaise, with, may be, the distress in the nose and orbits, and irritation in the Schneiderian membrane.

Some who had irritable heart, and others who had not, experienced a very unpleasant palpitation, and were obliged to arise to a sitting posture at night to get relief from dyspnœa. Here seemed to be a symptom corresponding to what the veterinary surgeons called the "thumps" in horses, especially those worked while suffering from the epizoöty were not infrequently affected with such strong action of the heart, that each throb was perceptible, and the horses became wet with perspiration even while standing in the stall.

Another result intimately connected with this, and perhaps arising from it, was that almost all mares with foal, severely afflicted with the epizoöty, aborted. Did this arise from the dyspnœa? A similar tendency occurs with pregnant women who suffer from the catarrhal fever.

Cazeaux says, on page 442 of his work on midwifery, "Though some epidemics (of influenza)

have appeared to spare pregnant women, many have affected them as severely, at least, as other individuals exposed to the same influences. Thus I found, as did also M. Jacquemier at the Maternity Hospital, that the epidemic of influenza attacked a great many pregnant women, but contrary to his observations, I witnessed numerous abortions as a consequence either of the disease itself, or of the violent spells of coughing which tormented the patient."

Zuelzer, in vol. ii. of Ziemssen's *Cyclopedia*, page 535, says: "Pregnant women frequently suffer abortion, and in many who are afflicted with amenorrhœa, the catemenia are established. This effect of influenza has been repeatedly verified in many epidemics. It is, therefore, very worthy of remark, because it recalls analogous phenomena in other infectious diseases, and is indicative of an agency exerting an important alterative effect upon the whole organism."

What is this agency? The effect of the disease is to depress the nervous system, and interfere with the free and full action of the heart. There is, in short, imperfect aeration of the blood, and the blood of dyspnœa induces emptying of the uterus.

Dr. J. Matthews Duncan, in speaking of another subject, says, in his clinical lectures on the diseases of women: "Here I would mention to you an interesting set of facts in connection with this subject. If you read over the cases of heart disease, especially mitral regurgitation, you will find that in them women are very likely to miscarry, and miscarriage is in them almost certainly a direct result of the disease (jaundice).

"If there is a poison in the woman's blood, in this case, it is probably a poison from imperfect aeration of the blood, and that induces the miscarriage. This has been almost proved by experiments on the lower animals, showing that the blood of dyspnœa induces emptying of the uterus. You have further evidence in the fact that the children are almost always born fresh, if not alive. The disease has brought on miscarriage; it has not killed the child. The condition of the blood has stimulated the uterus to action directly."

It seems to me that the abortions in a large percentage of cases are due directly to this—the stimulating effect of deoxygenated blood upon the uterus, and exceptionally, if at all, to the violent spells of coughing referred to by Cazeaux. The cough has been a comparatively unimportant element in this epidemic.

I have noted but one case of premature birth which I attributed to the catarrhal fever. The birth, an easy one, occurred, it was judged, at eight months. The child's face was black, and congested with imperfect circulation, and it died about eight hours after birth. The mother did well.

Of the 257 cases of the catarrhal fever treated, three deaths may be reported as a direct result of the disease, one miscarriage, and three deaths from complications. Two were complicated with whooping-cough, and one with capillary bronchitis. The first case resulting in death I have noted. The second and third were children, one 1½ years of age, the other younger. These died directly from the effects of the disease, one after a relapse, and the other early in its onset. The symptoms did not vary from those already noted in the cases treated, the most marked being depression of the nervous system and general prostration—not usual in the early stages of other diseases.

Cases of whooping-cough during the epidemic of that disease, which has lasted now nearly one year, have been very amenable to treatment, no death having occurred in any cases treated from the beginning of the disease. But since the beginning of the epidemic of catarrhal fever, cases complicating that disease have proved much less amenable to the influences of the remedies used, and two deaths have occurred from such complications. One case, a boy one year of age, affected with bronchitis, had nearly recovered, and was able to be out with his nurse, when he was suddenly seized with the catarrh and died within twenty-four hours. The symptoms were similar to those of capillary bronchitis.

I have not attempted to go into any exhaustive analysis of these cases. Some of them I was not able to verify with the clinical thermometer, and in none of them had I the opportunity to study the varying symptoms and temperature during the whole of the twenty-four hours, as may be done in a hospital practice; and yet I have been able to observe enough to convince me that when we have to deal with an epidemic of catarrhal fever, we have to do with a serious malady, either as a primary or a complicating disease. This disease is, according to my experience, much more serious than that of whooping-cough, and less amenable to treatment. The results are liable to be serious, whatever age is affected; but the young, the aged, pregnant women, and those reduced by other diseases, are peculiarly liable to suffer.

My principal object in this brief paper has been to call the attention of the profession to the deleterious influence of this disease upon pregnant women, and to what I deem to be the cause of such serious results.

As to the treatment, I have nothing new to offer. Tonics, particularly the preparations of cinchona, are perhaps as satisfactory as any—as far as constitutional treatment is concerned. Heart tonics are no doubt sometimes indicated. Children often get marked relief from the application of camphorated oil to the throat and chest, and a syrup containing some slightly relaxing agent, as syrup of ipecac or squill, combined with a little camphorated tincture of opium, to lessen the frequency and hoarseness of the cough, and in some degree allay the nervous irritation.

There certainly are few, if any, diseases which occur so frequently as epidemic catarrhal fever, and which so suddenly appear over widely-extended territories.

In view of the seriousness of the results frequently attending these epidemics, it well becomes us to study them in all their bearings. No doubt some of the many pages of medical literature devoted to diseases which a busy practitioncr might not see once in a lifetime, might profitably be given to the discussion of this most common ailment.

HISTORICAL NOTE ON PROGRESSIVE PERNICIOUS OR IDIOPATHIC ANÆMIA.

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IN the historical introduction to his article on "Pernicious Anæmia," Immerman[1] gives to Biermer[2] the credit of having firmly established it as an independent affection, and devised a general term for the group of symptoms which go to make up the *ensemble* of that disease. Truly he says, "such cases (as B.'s) had been noticed and described before," and he refers, among others, to a series published by Zenker[3] in 1856. Further, he says, that "Gusserow was really the first to enrich gynæcological literature with an account of several cases of 'extreme anæmia in pregnant women.'" It is my purpose to show that, long before either of these men wrote, the disease in both its forms, in connection with or independent of pregnancy, was not only fully recognized but graphically described by one of our own countrymen.

That Biermer was not the first in the field, is not a difficult task to prove, for Prof. Pepper,[4] in a very interesting article, shows that Marshall Hall was acquainted with the disease, and that Addison admirably described it in his work on "Diseases of the Supra-renal Capsules," published in 1855. Dr. Fred. Taylor,[5] writing on the history of the affection, considered that Addison should "be recognized as the first known observer of fatal anæmia," while, since his time, the disease has never been "lost sight of at Guy's." The earliest publication that Taylor refers to is an abstract of one of Addison's cases in the *Medical Gazette* of March, 1849. He then gives abstracts of sixteen undoubted examples collected from *Guy's Hospital Reports and Records*, as well as from the *London Path. Soc. Trans.* All of which had been published prior to Biermer's article. Drs. Wilks, Moxon, and Habershon were especially well acquainted with the disease, labelling it Idiopathic Anæmia. Earlier yet, in 1823, Andral probably recognized it.

We have had occasion lately to go over the literature of anæmia, and, of the numerous works, to consult Williams' "Principles of Medicine." In the chapter on that subject, he refers to a series of cases of anæmia, generally fatal and connected with pregnancy, published by Dr. Channing, of Massachusetts. The article referred to is printed in the *New England Quarterly Journal of Medicine and Surgery*, No. 2, October, 1842, entitled "Notes on Anhæmia, principally in its connection with the Puerperal State, and with Functional Diseases of the Uterus; with Cases." By W. Channing, M.D.

The paper is divided into two parts; in the first part the cases are given, in the second part remarks are made on them. The first part is sub-divided: 1. Cases of anæmia without any connection with pregnancy. 2. Cases connected with pregnancy. In the first part seven cases are detailed, but no dates are given as to the time any of the patients were under observation; in the second portion of his clinical report, one of the cases (Case XII.) came under his observation as early as 1832. It will thus be seen that Channing took notes of the disease before any were ever published on it, and it is probable that as early, if not earlier, than any other observer, he distinctly recognized it. It was not familiar to Channing alone, but others noted it. Thus Dr. Spear had seen four fatal cases; Stevenson, Jackson, and others report cases. It was therefore a clearly defined disease in the minds of the physicians about Boston, as early as 1832-'35, and although it may have been known to Addison at that time, we have no proof of it, as the first public record of his case was in 1849.

As the journal from which these notes were culled is in the hands of but a few, and as pernicious anæmia is exciting so much attention, I will make an abstract report of Channing's cases, with an analysis of them, and an abstract of his remarks. Then, too, his observation is so truthful, it is but just that his good work should be revived.

The first series of cases—seven—do not demand much consideration, as they were not in all probability cases of what now is termed pernicious anæmia. In all save one, there was a definite cause for the anæmia, while but two of them died.

CASE I.—Was that of a young man, dying of anæmia without organic disease, nor was there any lesion found at the autopsy.

CASE II.—Female, single; disease followed repeated bloodletting; she was not emaciated at the time of death. Autopsy: nothing morbid; heart natural.

CASE III.—Female; married; not pregnant; disease followed menorrhagia; "*rarely known flesh so well preserved midst symptoms so grave;*" complete loss of strength; recovery.

CASE IV.—Anæmia following a pneumonia which occurred three months after confinement; pallor, loss of strength; no emaciation; recovery.

CASES V, VI, VII.—Are similar in that they originated from uterine hemorrhage and are of interest because of some special symptoms common to the three, as the blanched appearance, *profound prostration*, absence of emaciation, and a *sense of beating in the head.* Channing especially notes the appearance of the superficial veins. They are, *as is almost always the case, most visible on the inside of the wrist; they present the appearance of bright pink or rose-colored lines just beneath the skin; some of them seem flat.* As before mentioned, it can not be said any of the above list were cases of idiopathic anæmia, yet in all probability, with the modern means of diagnosis, some would have been thus classified.

Channing remarks, "I might add easily to these cases; but they will suffice to show how strong the anæmic tendency may become from excessive uterine action alone, though connected with a periodical function, and how comparatively safe it (this tendency) is when regarded with the *true disease* which attends pregnancy or follows delivery."

[1] Cyclopædia Pract. of Med., Ziemssen, vol. xvi. pp. 572–602.
[2] Correspondenzblatt f. Schweizer Aerzte. Jahrgang., ii. (1872), No. 1.
[3] See Ziemssen's Cyclopædia.
[4] American Journal of the Medical Sciences, October, 1865.
[5] Guy's Hosp. Rep., vol. xxiii., 3d series, 1878, pp. 183–200.

He then narrates a different class of cases. "These," he says, "have connection with pregnancy, or the puerperal state. At least they occurred during one of these states, or having begun in the first, the disease has continued into the second. The disease in these connections has always been fatal." He says he knows of a well-marked case *that was cured*.

CASES VIII, IX, X.—Cases of Dr. Spear, who had seen five cases. Bloodlessness extreme; animal functions not impaired; no emaciation; rapid pulse; very little suffering; death. No autopsy.

CASE XI.—Mrs. W., confined three weeks previous to death; no milk, mammary abscess; no appetite, vomiting, diarrhœa; *tumultuous action of the heart;* mind clear; death. No autopsy.

CASE XII.—Seen with Dr. Stevenson and Dr. Jackson; notes by Dr. S. Mrs. H., æt. 25, of robust appearance and uncommon bodily vigor; healthy pregnancy; delivered Dec. 15, 1832, of her third child; no hemorrhage. She died Jan. 3d succeeding, after an illness of sixteen days. I cull from the daily notes the following: Ol. ricini given December 17th. Next day severe diarrhœa. Diarrhœa soon checked; nausea and vomiting occured at intervals; appetite was good; thirst great. Pallor, increasing until death; surface like wax; extremities cold, at times numb; *flushes and chills;* warm moist skin; increase of temperature. Pulse from 120 to 140; at first quick and strong, then feeble and rapid; palpitation; pulsation in head, breast, and arms; sighing, faintness, syncopal attack, overpowering sense of faintness and fatigue; bodily efforts produce panting and distress. Headache, intolerance of light and sounds; slept considerably at first; pupils at first contracted, afterwards dilated; delirium slight towards evening by second day, and by sixth day *excitement of mind, which increased till evening, when she talked incessantly.* Cough throughout; respirations laborious towards end of illness. Urine at first scanty, afterward abundant (4 pts.); frequently passed; turbid and offensive, until four days before death; no albumen. Channing adds that she was not emaciated.

Autopsy.—Adipose membrane full of fat. Serous effusion in cavities of thorax. Heart pale and flabby; no blood flowed on division of its vessels. Spleen rather large. Channing adds to autopsy notes that the textures were dry and pale; blood small in quantity, pale, liquid, uncoagulated.

CASE XIII.—Mrs. W., æt. 29. Three children, boys; health good while pregnant. Last labor March 5, 1836; normal; no hemorrhage; abundant milk, which began to diminish by end of second week, and disappeared in third. Mammary abscess second week, discharging the middle of the third week. "We now come to those symptoms which we may fairly call anæmic." Debility; chilliness; irritable state of whole system; pallor; clean, pale tongue; thirst; loss of appetite; constipation; inability to stand the mildest cathartic. Especially noted perpetual consciousness of *sounds in the head like sawing wood*, but auscultation revealed no murmur. Death seven weeks and three days from her confinement, or two days over four weeks from discharge of abscess.

Autopsy (J. B. S. Jackson).—Whitish coagula in long sinus, ecchymoses of internal surface of dura mater. Heart moderately firm, some quite soft light-colored coagula in both sides. Blood unusually pale.

CASE XIV.—Mrs. W., æt. 42. Pregnant thirteen times; four miscarriages. Last labor in April. (Notes three weeks before death, October of same year.) Confinement natural, without much hemorrhage. Three days after began to fail. Pallor extreme; skin warm and dry; one or two chills. Pulse ranged about 120, small and irritable; susceptible to noise; irritable temper. Appetite poor, constipation, laxative over-act. In last week nausea. Lost some flesh.

Autopsy (Jackson).—Lungs œdematous. *Heart usual size, flaccid, pale; pallor greater than of voluntary musles, which were more so than usual.* Left ventricle thin; external pericardial surface somewhat red, inner surface stained with blood. *Blood watery, pale red; some flocculent putrilaginous-looking coagula in right side; moderate quantity of fibrin in right ventricle, and pulmonary artery of dull yellowish color and quite soft; some of same in left auricle. Contents of veins appeared morbid—blood mixed with a thick,* whitish opaque fluid like pus. Spleen large, dark *red, soft; on pressing on it a thick grumous fluid forced out in great abundance, leaving proper tissue colorless.*

CASE XV.—Mrs. W., æt., 22, delivered lately of second child, never knew disease or trouble. Dr. C. saw her two weeks after confinement. No emaciation; face, lips, tongue, edges of eyelids and angles of eyes entirely white—not pearly white, but *there was the slight yellow mixed with the white which gave it a dirty hue.* Expression anxious; was feeble, with a hollow voice; appetite gone. Slight suffering, but soon took to bed from debility. Noises in the head, puffing or buzzing. No sleep. *One symptom very striking*—color of blood in the veins—bright pink, especially in veins of wrist; vessels flat, not round. *Purpura over extremities.* Pulse always rapid; respiration hurried. Death in three weeks. No autopsy.

CASE XVI.—Mrs. K., anæmia began and was fatal during pregnancy. Had had several children still-born; out of health several years. Not well during this pregnancy. Seen April 2d, pallor, sore mouth, swelling and soreness of genitals. April 7, increase of all symptoms; roaring in ears; delirium; diarrhœa; death, April 11.

CASE XVII.—Mrs. B., fourth child. Months before last confinement, pallor, ringing in ears, tendency to faintness, palpitation, aphthous mouth, diarrhœa, and vomiting. Delivered October 27, 1841; normal. Ol. ricini third day, followed by diarrhœa, at first not urgent; in a week, very extreme and continued till death. Pulse 120 to 144, very feeble.

Pernicious anæmia, as understood at the present day, in addition to the facts secured by means of the microscope and the ophthalmoscope, is characterized by gradual and increasing pallor, loss of

strength, absence of emaciation, fever of an irregular type; by languor to extreme prostration, giddiness, dulness or feebleness of intellect, somnolence, delirium, coma; by a rapid, feeble, irregular pulse, palpitation of the heart, feeble or absent impulse and first sound, cardiac, arterial, and venous hæmic murmurs; by hemorrhages; by breathlessness on exertion or excitement; by loss of appetite, weak digestion, perhaps nausea and vomiting, or a diarrhœa. It occurs at any age in either sex; has no positively definite cause, runs its course in from six weeks to six months, and is generally fatal. After death, along with the changes in the blood, there is found fatty degeneration of the heart, the liver, and the kidneys.

Reviewing the last series with the light of the present, it will be seen how admirable is the description, and how wonderfully acute an observer Channing must have been. In the history of each case may be found one or more symptoms, considered at this time as essential; all of the symptoms are noted at one place or another. The record of Case XII. presents a perfect picture of the disease, while the following only pale in the light of it. The thirteenth case might, from the anatomical appearance of the spleen, be judged leucocythæmia, but the clininal notes portray anæmia. The twelfth case is worthy of note from its rapid progress.

In his general remarks Channing refers to the brilliant whiteness, dryness, smoothness and warmth of the skin as a constant symptom; to the absence of emaciation and the occurrence of great debility; to the fact, most characteristic, of death coming on without grave enough symptoms, "that the mysterious malady has not its place in any organ;" to the patient being indifferent, serene, even prophesying death calmly; to the noises in the head; the tumultuous action of the heart; the labored respiration, the nausea, diarrhœa, and uræmia. He speaks of hemorrhage, but does not appreciate its value as a symptom. He lays great stress—more than modern writers—on the appearance of the veins: they are scarce, flat, pink, increased on the wrists; not pathognomonic of fatal anæmia, as he notes this state in other anæmic cases. The pathology he admits is obscure, but thinks the disease has its seat in the small vessels; that the small vessels have much to do with the formation of blood (a shrewd guess), and that their function is subverted; this is true, for one reason, because of the absence of emaciation in the midst of the universal absence of all functions that sustain flesh. He calls attention to the connection of pregnancy to the disease, and claims to be the first to do so. The prognosis is almost always fatal; he knows of one recovery. Treatment is futile; transfusion, the *modern method*, he disapproves of, for it is filling empty vessels of an unlike fluid.

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CHOREA IN THE NEGRO.

BY WHARTON SINKLER, M.D.,
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THE question of the frequency of chorea in the negro race has excited some interest since Dr. Weir Mitchell sent out his inquiry on the subject through the Smithsonian Institute several years ago. He states[1] that, in answer to his circular, many physicians in the Southern States of this country and in Cuba sent him replies. The almost universal testimony was that the disease was very rarely met with in the negro. Indeed, forty-nine of sixty physicians had never seen a case in the black, and the remainder considered it infrequent in that race. However, some physicians in Virginia wrote Dr. Mitchell that they regarded chorea as common in one race as the other. Dr. G. W. Benton, a physician of large practice in a portion of Florida thickly populated with negroes, told me a few days ago, that in thirty years' experience he had never seen a case of chorea in a black. On the other hand, Dr. S. H. Stout, of Chattanooga, Tennessee, to whom I am indebted for a long and interesting communication on the subject, believes that chorea is quite as common in blacks as in whites; indeed, his figures show that it is more common in the former. He states that he can recall twenty-one cases of chorea which have come under his observation. Of these, thirteen were black females, four white and three mulatto females, and one white male.

Dr. Mitchell states "that the weight of evidence is in favor of the opinion that the black is less liable to chorea than the white." My own experience leads me to the same conclusion. Out of three hundred and nineteen cases of chorea which have been treated at the Orthopædic Hospital and Infirmary for Nervous Diseases in this city, most of which I have seen personally, but one belonged to the negro race.[2] This child was so light a mulatto, probably an octoroon, that it would readily be taken for a white child, and both of its parents were of light complexion.

I have seen in private practice one case of chorea in a black. The following notes were taken when the patient was first seen:

Melinda D., æt. 19 years, born in Washington, D.C. Married. Both parents are dead. She is a negress with dark skin, short woolly hair, and features peculiar to the race. She says that her mother was a mulatto and her father light-colored. She was always delicate as a child, has always been subject to headaches, and been nervous. Six months ago she had an attack of acute rheumatism, and was confined to bed with it for some time. She has been well of it only three months. The menstrual function was established at 14 years of age, and has been regular until about three months ago, when she became pregnant. Since becoming *enceinte* she has not felt well. About four weeks ago, she was struck on the knuckles of the left hand with a stick, the blow caused considerable pain, and the knuckles are still swollen and tender to the touch; a week after this irregular movements began in the left hand and soon extended to the shoulder and

[1] Lectures on Nervous Diseases, p. 143.

[2] According to the *Bulletin of the National Board of Health*, the colored population of Philadelphia is 35,000, and the white population 851,339; or 1 to 24.32. From these figures it is not unreasonable to suppose, if chorea was as common in both races, there should have been a larger proportion of colored persons among the cases of chorea above referred to.

left leg. The movements have been growing worse.

Present Condition (September 24, 1881).—The patient drags the left leg in walking, and when she sits down it is constantly in motion. The left arm is flexed and extended incessantly, and the fingers twisted and turned in every way. The face twitches and she makes a clucking sound with the mouth, but the speech is not affected. Voluntary effort increases the movements excessively. When she attempts to grasp an object, the arm is thrown into frantic gyrations and it is almost impossible to seize the object. While at rest the movements continue, but less violently. There is no paralysis. Dynamometer, right hand, 80°; left hand, 60°. Patella reflex present in the usual degree. She sleeps poorly, being often wakened, she thinks, by the movements. There is no tenderness over the spine. Heart sounds normal. Appetite poor. Bowels regular.

The patient was ordered five drops of Fowler's solution, thrice daily, and was seen at the end of five days very much improved. She was not seen again, as she left for her home in Maryland, in a day or two.

In this case there were two conditions which predisposed to chorea, namely, the attack of acute rheumatism and the pregnancy, and the blow on the wrist may have acted as an exciting cause.

Dr. Skinner, of Glasgow, Delaware, has reported a case of chorea in a black.[1] The patient was a pure negro girl, aged eighteen years. She had had subacute rheumatism, which was followed by bobbing and shaking of the head, and then general chorea. She menstruated regularly. There was an apex murmur heard over the heart, and this persisted after the chorea was well.

This is the only case of the disease in the black I have met with in medical literature.

MEDICAL PROGRESS.

Resection of the Stomach.—Dr. F. W. Koehler reports the case of a woman, aged 65 years, in whom this operation was performed for carcinoma. An incision was made, commencing about two inches below the ensiform cartilage, and terminating about two inches below the umbilicus. After all bleeding points in the abdominal wall had been attended to, the peritoneum was incised, and the stomach partly drawn out of the abdominal cavity. The cancerous mass was found in the greater curvature of the stomach, and extended from near the pyloric end half-way to the cardiac end. On cutting through the wall of the stomach, the cavity of the organ was found occupied by an offensive material, seemingly a mixture of food and cancerous tissue. This was carefully sponged out and the dissection then completed. During the removal of the tumor, three arteries of considerable size, were cut. The blood from these vessels was, however, directed into the cavity of the stomach, and, in a very short time, ligatures were placed around them, and they gave no further trouble. Having completely excised the growth, the cut edges of the stomach were held in accurate apposition, and about forty sutures inserted, they being placed very close together. It should be stated that the sutures were of silk, which had been soaked in melted beeswax, to which some carbolic acid had been added. After all the sutures had been put in, the stomach was returned to its position in the abdomen, and, it being certain that all hemorrhage had been checked, and that the abdominal cavity was absolutely clean, the external wound was closed, and the patient placed in bed, with the foot of the bed somewhat elevated. The operation lasted nearly an hour, and towards the last the patient's pulse was very weak. Stimulants were administered in moderate quantity, and, for a while, the patient seemed to rally nicely—the pulse growing stronger, and she herself growing fretful, declaring her position in bed an uncomortable one, and the covering too heavy. These favorable symptoms were, however, of short duration, and, in spite of stimulants, she gradually grew weaker and weaker, and at 5.30 P.M. expired.—*Louisville Medical Herald*, September, 1882.

Silvester's Method in Drowning at Paris.—Dr. A. Voisin communicated to the Rochelle Congress (*Gaz. des Hôp.*, September 5) the satisfactory results which have attended the great efforts made for some years past by the Paris Municipality to improve the treatment of drowned persons in that capital—efforts which Dr. Voisin has been the chief instrument in carrying out. He now reports the results which have been obtained: 1. The almost absolute certainty of restoring life to persons who have remained under water, or "between two waters," for a period varying from a few seconds to five minutes—no one formerly having been saved after three minutes' submersion. 2. He has succeeded in restoring to life persons who have remained under water from five to twenty minutes. 3. These results have been obtained in individuals not merely in a state of syncope, but in an asphyxiated state, as shown by their violaceous face and lips, their open mouth, and flaccid masseters. 4. These results have been gained in consequence of the excellent arrangements made for the rigorous carrying out of Silvester's method; the effectual application of warmth to the whole surface of the body by calorific generators; the ready access to warm baths and cold douches; the keeping the patient quietly in bed for some hours after his restoration; the whole system being administered by a well-trained and disciplined staff, which is kept in constant readiness.—*Medical Times and Gazette*, September 16, 1882.

Abnormal Presentations in Three Successive Pregnancies.—Under this heading M. Bailly (*Archives de Tocologie*, May, 1882) records the histories of three successive deliveries in which there was prolapse of the cord each time, and the presentations were two breech and one footling. The latter presentation occurred notwithstanding very persistent efforts to maintain presentation of the head by means of a Pinard's bandage worn during the latter months of pregnancy. As there was no pelvic deformity, the author refers this repeated abnormality in presentation to irregular formation of the uterus, in consequence of which the lower part was more capacious than the upper, and thus would accommodate more readily the larger pole of the ovum formed by the breech and reflected limbs than the fundus would. No attempt is made, however, to prove this opinion by actual measurements of the uterus.—*Edinburgh Med. Journ.*, August, 1882.

Treatment of Typhoid Fever with Ergot.—At the meeting of the Académie de Médecine held September 5th, M. Hervieux read, in the name of Dr.

[1] Philadelphia Medical Times, July 31, 1875.

DUBOUÉ, of Pau, a note on the treatment of typhoid fever with ergot. Dr. Duboué had been employing this method of treatment for seven years, and has now had a sufficient number of cases to warrant reliable conclusions. He believes that ergot is the most efficacious remedy which we possess to combat all the forms of typhoid fever, even the gravest cases.—*L' Abeille Méd.*, September 11, 1882.

DURATION OF PREGNANCY.—DR. HELEN IDELSON (*Petersburgh med. Woch.*) found that, of 4,370 patients in Prof. Horwitz's obstetrical clinic, only 488 could furnish the requisite data for the determination of this question—viz., the exact date of the last day of the last menstruation, and the maturity of the fœtus. After showing the great differences which prevail in various animals, and the great differences between the maximum and minimum admitted by authors in woman, she states as the result of her own researches, that the average period was 278.8 days—viz., a minimum of 226 and a maximum of 328, or a difference of 102 days. She sums up the results of her investigations as follows: 1. The duration of pregnancy amounts to 278.8 days, or nearly forty weeks. 2. The sex of the infant influences the duration, this being longer in female infants. 3. The heavier the child, the longer is the duration.(?) 4. The duration is longer in multiparæ than in primiparæ. 5. The younger the woman, the longer is the duration. 6. The duration is longer in married than in unmarried women. 7. The first movements of the child are felt, on an average, on the 135th day, but later in primiparæ than in multiparæ.—*Dublin Journal of the Medical Sciences*, September, 1882.

TREATMENT OF ASCARIDES LUMBRICOIDES.—DR. GUERMONPREZ (*Bull. Gén. de Thérap.*, p. 89, 1882) sums up a long article on lumbricoides thus: 1. Wormseed (whose action is not to be confused with that of santonin) is by far the best medicament for killing as well as expelling round-worms. 2. Santonin does not kill the worms outright, it excites them to livelier movements, and these may reflexly stimulate the intestine so as to expel them; but they may also only exaggerate the evil if there is obstruction. 3. Santonin is, therefore, by no means always to be chosen. It does no harm if the worms are young and not numerous; if they are mature and many, it may be dangerous even in reasonable doses. 4. The purgatives usually given with vermifuges probably do more than the latter to cause expulsion of the worms; simple evacuants will often suffice. 5. Ordinary hygienic means directed to overcoming the lymphatic cachexia of the patient, or simple change of food and abode, may at times be enough to rid him of the worms without any medicine whatever. 6. Hence our treatment should not be the mere routine administration of santonin, but should be determined by the circumstances of the case. Change of air, and of diet, and of simple evacuation, are not to be forgotten.—*Practitioner*, September, 1882.

EXTIRPATION OF A TUMOR OF THE CRANIAL BONES AND MENINGES.—LANGENBECK (*Gaz. Méd. de Strassbourg*, No. 6, 1882,) reports the case of a woman, aged 60, in whom there had developed in 1868, on the frontal prominence, an ulcerating tumor, probably caused by repeated wounds with a comb. It was removed in 1874, in 1878, and again in 1879, trepanning being necessary at the last operation. The tumor again developed, and in February, 1881, had attained the size of the palm of the hand. It was again removed, a large fragment of the bone and dura mater being taken away at the same time, it having been found that the disease had penetrated to the pia mater; a small portion of the latter was cauterized with chloride of zinc. The operation was done without the spray; the wound was filled with a blood clot, and dressed after Lister's plan. The wound remained antiseptic.

Langenbeck recommends the use of the Esmarch bandage for the head. The head is wrapped with gauze, and then the constricting band is carried around the head from the occiput to the forehead.—*Journ. de Méd. de Paris*, September 2, 1882.

THE TREATMENT OF HYDRARTHROSES. — PROF. VOLKMANN (*Centralblatt f. Chirurgie*, August 19), in reference to a discussion upon this subject at the Paris Société de Chirurgie, observes that in chronic effusion into the joints, he has several hundred times performed puncture of the joints, and followed it up by washing out the cavity with a solution of carbolic acid of from three to five per cent., without having ever met with any accident, or even the least disturbance, after this manipulation. As a general rule, from ten to fifteen glass syringes full, capable of holding each 45 grammes, had to be alternately employed, and the fluid allowed to run away, before this was discharged in a clear condition, showing that the synovial fluid, which the added carbolic acid easily renders turbid, was entirely removed, and the joint thoroughly washed out. In order that the carbolic acid might exert its influence on every part of the surface of the capsule, the joint was then moderately filled by the injection of from one to three syringes full, and then submitted for a short time to movements of flexion and extension. A larger quantity of the solution than this was never left in the joints, and even the slightest symptoms of carbolic intoxication have never been observed. After the washing-out was finished, the limb was always surrounded by a Lister dressing, and kept immovably for some time on a splint. When the effusion has not been of too old a date, recovery has always followed a single puncture and washing-out, although, as a rule, firm bandaging is required for the prevention of relapse, for diminishing the thickening of the capsule, etc. In bad cases, in which there has been great extension of the capsule and ligaments, due to large and old hydrarthroses, the punctures and washing-out have to be repeated two, three, even four times, at intervals of several weeks, before the capsule contracts sufficiently. Iodine injections, which Prof. Volkmann formerly employed frequently, he has now discontinued, as possessing no advantage, and occasionally giving rise to suppuration of the joint. In the worst cases, with great distention and thickening of the capsule, great villous formation, large fibrinous coagula, dropsy, riziform bodies, or *gonitis fibrinosa*, without fluid exudation, Prof. Volkmann always makes a double incision into the joint, and introduces two very short (sufficiently long, however, to completely enter the joint) drainage-tubes, which, after carefully washing out the joint, are left in as long as any secretions issue through them. He is unable to say how often he has performed this operation, which has been by far the most frequently executed on the knee, but certainly more than a hundred times. Even in these cases only disturbances of a very slight nature were sometimes met with, although the procedure was employed in bad cases of disease of the joints when great dropsical effusion was present. The general conclusion, therefore, is that both puncturing and washing-out the joint, and the double incision and drainage, with the aid of antiseptics, may be declared to be operations unattended with danger and followed by satisfactory results. How thoroughly Prof. Volkmann has been convinced of this may be inferred from the fact that for a series of years he allowed Prof. Rancke to attach a manometer to the trocar, in order to institute experiments on the intra-articular pressure in the living man. None of these experiments did the

slightest harm to the persons on whom they were performed; and it is to be much regretted that, owing to its having appeared only in the form of a Latin *Habilitationschrift*, this distinguished work of Rancke, in which he arrives at the most important conclusions concerning the conditions of pressure in the knee-joint and their variations in the various positions of the limb, are so much less known than they deserve to be.—*Medical Times and Gazette*, September 16, 1882.

New Method of Reduction in Dislocations of the Humerus.—Mr. Jas. E. Kelly recommends the following as successful when other plans have failed. The patient should be placed as close as possible to the edge of the couch, on his back, with his head low. The operator places the injured arm at right angles to the body, and standing against it, with his side to the patient and his hip pressed firmly, but not roughly, into the axilla, he folds the arm and hand of the patient closely round his pelvis, and fixes the hand firmly by pressing it against the crest of his ilium. The second stage, during which the reduction is effected, is very simple, consisting merely of a rotation, or version, of the surgeon's body with a force and rapidity which necessarily vary with the peculiarity of the dislocation —some yielding most readily to a sudden and powerful effort, and others to gentle and gradually increasing traction.—*Dublin Journal of the Medical Sciences*, September, 1882.

Obstruction of the Bile-duct: Formation of a Fistulous Communication between the Gall-bladder and Intestines: Cure.—Winiwarter (*Prager med. Woch.*, No. 21, 1882) reports the case of a man, 34 years old, in whom an indolent tumor formed in the hepatic region after what was supposed to have been an attack of perityphlitis; at the same time the fecal matter became clay-colored. The tumor increased rapidly in size; its puncture allowed the escape of two litres of a fluid precisely similar in composition to the bile, and the tumor was reduced in size about one-half.

Three weeks later, the tumor occupied all the right half of the abdominal cavity. The patient was slightly jaundiced, and although he retained a fair appetite, he progressively lost flesh. A diagnosis was made of dilatation of the gall-bladder, caused by obstruction of the bile-duct. The tumor was punctured a second time and four litres of bile withdrawn; in the next fortnight it was necessary to tap the tumor three times again. Finally, Winiwarter determined to establish a fistulous communication between the gall-bladder and the intestines. After having opened the abdominal cavity, he found the gall-bladder with its anterior surface adherent to the peritoneum and to the transverse mesocolon. After puncturing it, he fixed it by sutures to the ascending colon, and this portion of the intestine was fixed to the abdominal walls. Four days later the gall-bladder was emptied by means of a medium-sized trocar and canula, passed through the common wall of the intestine and gall-bladder and the canula left in place. The desired end was not however attained, as the feces remained discolored.

Five months later, the gall-bladder being reduced in size, a second attempt was made; on this occasion the bladder was surrounded by a loop of small intestine, to which it was fastened by sutures, a bistoury passed through the adherent portion, and a drain inserted. A small quantity of bile passed into the intestine, but the greater part escaped through the abdominal opening. The drain was left in place for eight days. At the end of three weeks, the attempt to close the abdominal fistula led to an accidental opening of the large intestine, by which an artificial anus was formed. The health of the patient nevertheless steadily improved, the external fistula became gradually obliterated, and the patient was cured.—*Gaz. Méd. de Paris*, Sept. 9, 1882.

The Treatment of Typhoid.—At the present time the treatment of typhoid fever is an opportune subject to engage the attention of the medical societies of Paris since the French metropolis is threatened with an epidemic of most serious proportions. The subject was brought before a recent meeting of the Académie de Médecine by M. Vulpian, who is applying his experimental skill to the service of practical medicine, and has been recently endeavoring to determine the value of the antizymotic treatment of the disease. The question is one of extreme importance, for it must be admitted that hitherto the advance of bacterial pathology has not resulted in that increase in our power over developed disease which might reasonably have been anticipated from so considerable an addition to our knowledge of the nature of morbid processes. There is strong reason to regard typhoid fever as of parasitic origin, and from this naturally follows an expectation that good may be done by germicide remedies which may reach the intestine without losing their influence. Nevertheless this method of treating typhoid fever has hitherto found little favor at the hands of practical physicians. Proceeding upon these lines, M. Vulpian has tried in turn iodoform, which caused only disgust; salicylate of bismuth, which, although of a certain efficacy, seemed to favor the occurrence of certain complications, such as dyspnœa and nasal and intestinal hemorrhages; boracic acid, which turned out as useless as iodoform; and, lastly, salicylic acid, to which M. Vulpian wished to draw the special attention of the Academy. It may be remembered that this was largely tried, especially in Germany, several years ago, but generally relinquished as being either useless or positively injurious. M. Vulpian found that when it was given in small doses, as one, two, or three grammes in the twenty-four hours, the results were almost *nil*, but if a quarter of a gramme was given every half hour, so that the patient took in the day about six or seven grammes of the pure acid, he believed that there followed an amelioration in the course of the disease both marked and lasting. Some patients presented the accidents of salicylism-delirium, which quickly subsided when the drug was discontinued, or a little albuminuria, but these were exceptional. In most cases these doses were well borne, and the beneficial influence of the drug was shown in improvement of the general condition and of the mental state, and especially in a fall of temperature, which had a permanence not observed with other antipyretic remedies, such as carbolic acid. These results are in striking contrast to those obtained by other physicians who have tried salicylic acid in typhoid. M. Germain Sée, for instance, declared that he had never observed a true and lasting defervescence to be obtained by its use, but only a transient fall of temperature of a few tenths of a degree. It remains to be seen whether the results obtained by M. Vulpian are not due to the series of cases thus treated having been of a mild type. The difference in epidemic severity is a fertile source of fallacy regarding the treatment of typhoid. Experimental physiologists are often apt to draw hasty and untrustworthy conclusions on points in practical medicine.—*Lancet*, September 16, 1882.

Precocious Menstruation.—M. Prochawnick reports the case of little girl, who died at three years of age from acute bronchitis, in whom there had been a discharge of blood from the vagina regularly every four weeks from the time when she was only one year old. The autopsy showed a much higher degree of

development of the uterus than is usual in such a young child, while the ovaries resembled those of a female at puberty.—*Gaz. Hebdom.*, Sept. 2, 1882.

RESULTS OF MARRIAGES WITH IDIOTS.—DR. BERKHAN, in the *Zeit. für Psych.*, makes some interesting observations as to the capabilities of microcephalic and other idiots to propagate their species. A semi-idiotic man has been married for some years to a healthy woman; there is no family. A healthy man, married to an idiotic wife, has had three children by her; two of them are idiots. These cases support Vogt's view —that while female idiots may bear children, the male are very frequently incapable of begetting them. Marriages are very rare between male half-cretins and healthy women, but are not uncommon between healthy men and semi-cretinous females who may happen to own a little property. The author has never seen the progeny of these marriages arrive at maturity; if not still-born, the children usually die during childhood.—*Dublin Journal of the Medical Sciences*, September, 1882.

LAPARO-HYSTEROTOMY FOR COMPLETE PROLAPSE OF UTERUS AND VAGINA.—A remarkable case of the above method of treatment is recorded in a recent number of the *Berliner klinische Wochenschrift*, by Dr. Kuhn, who was induced to practise it by the writings of Professor Müller, of Bern. The patient was a virgin, aged twenty-seven, whose life had been passed in indigent circumstances, and whose physical development had suffered in consequence. She did not menstruate until the age of twenty-one, and this function was scanty and irregular. To remedy this she put herself under the treatment of some quack, and shortly after menstruation had followed this person's treatment (the nature of which is not stated), the uterus and vagina became, within two days, completely prolapsed. The patient was then aged twenty-four, and from that time until she came to Dr. Kuhn, had been treated in various ways, every kind of pessary having been tried without success. When she came under his care she was anæmic and thin. The prolapsus formed a tumor as big as a man's fist. The vagina was completely inverted, and the prolapsed uterus contained in the sac so formed. The hymen formed a fold about a centimetre deep. The cellular tissue between the vagina and the bladder in front and the rectum behind was unusually loose, so that neither of these viscera were prolapsed. In January, 1881, the operations of anterior and posterior elytrorrhaphy and perineorrhaphy were performed, with the result that the patient was for a time relieved; but the artificially narrowed vaginal orifice became again gradually dilated, and in July of the same year the patient returned to the hospital. In August, therefore, with antiseptic precautions, the abdomen was opened. Both ovaries were first removed. Then an oval slice was cut off the fundus of the uterus, so as to give a kind of island of raw tissue surrounded by peritoneum. This raw surface was brought into contact with the abdominal wound, and the uterus then stitched into its new position, so that the peritoneum surrounding the raw surface on the uterus was united to that of the abdominal parietes. The patient recovered well from the operation—though not quickly, for she was about seven weeks in bed, owing to prolonged suppuration of the wound—and the uterus remained in its new position. Nevertheless, the patient was not free from discomfort, for she still suffered from prolapse of the vagina, on account of which a fresh anterior elytrorrhaphy and slight perineorrhaphy was performed. This succeeded, and at length the patient was well. Dr. Kuhn raises the question as to whether the removal of the ovaries was justifiable in this case. His reason for doing it was that the possible risks of pregnancy, with the uterus adherent to the abdominal wall, might be prevented. We must congratulate him, at least, on the docility of his patient; for we doubt whether in England many patients would be found to go through so much for the relief of so little. The case is interesting, also, because it shows how small a part the uterus itself plays in the phenomena of prolapsus. In this case the symptoms continued, although the uterus was immovably fixed to the anterior wall of the abdomen. —*Med. Times and Gaz.*, September 16, 1882.

SUDDEN DEATH IN DIABETES.—PROF. FRERICHS recently read a paper on this subject before the Berlin Medical Society, in which he classified the causes of sudden death in diabetes as due either to paralysis of the heart, syncope, or to gastric disorders, accompanied by pain in the head, delirium, coma, and dyspnœa. He describes a number of cases in which death occurred under these circumstances, the second group being capable of subdivision into a second, in which the one symptom of dyspnœa was absent. He believes that none of the various theories are tenable which attribute diabetic coma to, 1st, lesions of the brain, such as anæmia, hyperæmia, or œdema of the pia mater; 2d, hyperglycosuria; 3d, uræmia; or 4th, fatty embolism. He, however, holds that the presence of acetone in the blood will explain all the symptoms in such cases, and promises a communication on this subject at some future time.—*Journal de Médecine de Paris*, September 9, 1882.

GASTROTOMY FOR CARCINOMA; DEATH AFTER THREE DAYS, FROM INANITION.—DR. E. ROCHELT reports a case of stricture of the cardiac orifice of the stomach, occurring in a man, 70 years of age, in whom he performed gastrotomy; the operation succeeded in all its details, but the strength of the patient had been so reduced by prolonged abstention from food that death occurred from inanition, no peritonitis having been caused, on the third day.—*Wiener med. Presse*, August 27, 1882.

CEREBRAL LOCALIZATION IN THE SENSORY REGION. —THEODOR PETRINA (*Zeit. f. Heilk.*, ii.) reports six cases of his own in which there was disturbance of sensation in the limbs which had lost their motor power, where also after death there was found only lesion of the cortex of comparatively old date, such that the influence of shock or pressure could be excluded, and the symptoms could be referred directly to the lesion. Where sensation was affected the lesions were limited to a rather narrow region. The lower part of Broca's convolution, the convolutions of the isle underlying this, the lower third of the anterior central convolution, the anterior upper surface of the first temporal convolution, the upper third of both central convolutions, and the superior parietal lobule, that is, all the convolutions in the psycho-motor zone around the fissure of Rolando.

The loss of sensation from lesion of these localities consisted in a more or less decided weakening of the sense of pressure, or of pricking, or of locality and temperature, or of several of these. The sense of taste, smell, and color was not affected. These "cortical" anæsthesias differ in this limitation of loss of sensation from those hemianæsthesias which follow a destruction of the posterior third of the posterior limb of the inner capsule (the *carrefour sensitif* of Charcot).

Cortical lesions of the occipital convolutions give rise to no sensory paralysis. He concludes that the most anterior portions of the frontal convolutions and the surface of the entire occipital lobe are not the seat of sensory centres.—*Boston Med. and Surg. Journ.*, September 14, 1882.

LINEAR RECTOTOMY.—At the meeting of the Société de Chirurgie, held July 5th, M. TRÉLAT communicated the notes of a case in which he had performed linear rectotomy for the relief of cancerous stricture of the rectum, with the most satisfactory results. The patient was a man, aged 56, and suffered from an epithelioma of the rectum, which originated outside of the anus, and extended beyond the reach of the finger in the interior of the bowel; he suffered from intense tenesmus, which prevented sleep, and wasting diarrhœa, and was in a greatly reduced condition. Without any very sanguine hopes of success, M. Trélat performed linear rectotomy with the galvano-cautery, in the manner proposed by M. Verneuil, the incision starting at the tip of the coccyx, and deeply dividing the rectum as far as the anus. The result of this simple operation was very satisfactory: the tenesmus ceased immediately, and his general condition improved in every way. His death, which before the operation was imminent, was postponed for seven months and a half.—*Journ. de Méd. de Paris*, August 26, 1882.

COW-KOUMISS IN THE DIARRHŒA OF INFANTS.—DR. SENITSCHENKO, of Kasan, reports (*Petersb. Med. Woch.*, Sept. 2) that he has derived great benefit from the use of koumiss prepared daily from the milk of the cow. The infants were from three weeks to one year and nine months old, and suffered from dyspepsia, diarrhœa, or cholera infantum. He began with a teaspoonful every quarter of an hour, and after six hours increased this to a tablespoonful. The children soon became accustomed to it, and under its use the stools soon improved, and the frequent vomiting ceased. The children who were the subjects of rickets ceased to suffer from such constant thirst, while sleep became better.—*Med. Times and Gaz.*, Sept. 16, 1882.

ETHER-INHALATIONS IN ANGINA FAUCIUM.—PROF. CONCATA, of Bologna (*Rivista clin. di Bologna*, No. 3, 1882), has, for the last year or so, been accustomed to administer ether-spray as an inhalation in sore-throat. His method is simple. The patient takes the exit-tube of a Richardson's spray-producer in his mouth; sulphuric ether is sprayed against the pharynx for three minutes, and the treatment is repeated every three hours. Six cases so treated were cured without other means. The cases are all described as "anginas," of what variety is not quite clear. Each case, however, began with a rigor and a sharp attack of fever, with a temperature of 40° C. (104° F.). Swelling of the sub-maxillary glands in nearly all the cases, and pain and difficulty of swallowing in all of them, were noted. The tonsils were always swollen and protruding. One of the patients, a girl of 11, had scarlatina succeeding to the angina. Another patient, whose attack of sore-throat lasted eleven days, and was very severe, had enlarged spleen. Four or five days was the average duration of the attack; one patient, attended by Prof. Concato at home, got well in twelve hours. It is set down as an advantage of the ether treatment that it very speedily puts an end to the local pain and diminishes the swelling, and so quickly restores the power of easy swallowing. In some cases the fever quickly subsided at the same time. The treatment is worthy of further trial.—*Practitioner*, September, 1882.

SUTURE AND RESECTION OF THE INTESTINE.—M. MADELUNG has recently published a monograph on this subject (*Arch. f. klin. Chirurg.*, xxvii.), in which he analyzes the causes which have lead to success or failure in the cases which have been reported. In the majority of cases he believes that failure has been due to insufficient or improper technical details. He believes, basing his conclusions on experimental data, that the method of *invagination* should be absolutely rejected, even though it has been successful in two cases, one of which was his own: his reason for this opinion, is that the extended separation of the intestine from its mesentery necessarily causes gangrene of that portion of the bowel. He advocates the method of double suture as employed by Czerny. The author advises, at the time of operation, when the diseased intestine has been drawn outside of the abdominal cavity, to close the wound in the abdominal walls by one or two deep temporary sutures. The needles should be extremely fine, round, and curved, as recommended by Larrey, and fine silk should be used for the sutures. The points of suture of the intestine should not be more than three millimetres apart, as it should be remembered that the subsequent meteorism will probably double this distance. To avoid retraction of the intestine, the incision should divide its walls obliquely and not circularly. Madelung proposes the replacing of the metal disks, employed in Bozeman's and Czerny's method, by little disks of calves' cartilage.—*Gazette Hebdom.*, September 15, 1882.

THE URINE IN INFECTIOUS DISEASES.—A series of researches, chiefly by Selmi, Brouardel, Boutmy, and Gauthier, have shown that peculiar alkaloids, to which the term "ptomaines" has been given, develop in dead animal tissues which are in process of putrefaction. They present similar chemical reactions to the alkaloids which are found in poisonous fungi. Bouchard, according to the *Revue Médicale*, has suggested that, since the ptomaines only appear in tissues which are charged with microscopic fungi, it is permissible to suppose that the cadaveric alkaloids are merely the products of the "disassimilation" of vegetable organisms. Further, if bacteria living in the dead animal tissues produce bacteria, it is possible that the same bacteria, growing in a living organism, may produce substances analogous to ptomaines. Bacteria seem to appear in the living body in all infectious diseases. Hence M. Bouchard has endeavored to ascertain whether, during the course of infectious diseases in the human subject, any trace of these alkaloids can be found in the urine. His observations were made on cases of typhoid fever, "infectious pneumonia," and "infectious pleurisy," whatever the latter disease may be. All were dieted and no medicines containing alkaloids were given to them; and the urine was carefully preserved from putrefaction. An analysis showed that they contained alkaloids having all the characters of ptomaines. A series of normal urines examined, and specimens from patients suffering from pulmonary emphysema, valvular disease of the heart, presented no trace of alkaloids. The conclusion, however, is not beyond question, since M. Pouchet has affirmed that the presence of alkaloids may be constantly demonstrated in normal urine.—*Lancet*, Sept. 16, 1882.

PREVENTIVE TREATMENT OF ABSCESS OF THE BREAST.—PROF. LE FORT attributes the ordinary occurrence of mammary abscess in the superior outer portion of the breast to the pendant position of this portion of the gland. To avoid, therefore, the occurrence of mammary abscess, he advises that the breasts should be drawn to the median line and fixed there by a body bandage. By this means the breasts are prevented from hanging down at the sides, and the dragging due to their weight is avoided.—*Journal de Médecine de Paris*, September 9, 1882.

MORPHIOMANIA.—In a paper read at the Rochelle meeting (*Gaz. Hebd.*, September 2), Dr. Landowsky drew attention to the fact that besides the cerebral disturbances caused by the excessive use of morphia,

venous congestions were also induced by it, which in the long run led to permanent lesions, especially of the kidneys, inducing albuminuria or glycosuria. He also called attention to the too great frequency with which injections of this powerful agent are entrusted to inexperienced nurses and the patients themselves.—Prof. Verneuil remarked upon the frequency with which patients who come to consult surgeons have before that time been trying and abusing the hypodermic method. In their case a condition is generated, which at the time they may have to undergo an operation may compromise their existence by their intolerance of chloroform, or later on expose them to the occurrence of fatal erysipelas or diffuse phlegmon—not that they are still under the influence of morphia, but have become through it the subjects of glycosuria, albuminuria, etc. —M. Rochard, in relation to the colossal doses that are sometimes employed, cited the case of a lady who injected as much as three grammes (forty-five grains) of the hydrochlorate of morphia daily. He further remarked that even when large doses are injected, neither constipation, loss of appetite, nor any other affection of the digestive organs is produced, while even small doses taken into the stomach produce these effects.—Dr. Landowsky has observed in several women, who accustomed themselves to excessive injections, that small mucous bursæ formed on the sides of the first phalanx of the index and median finger, which are due to the manner in which these morphiomaniacs practise the injection rapidly with one hand when they are alone. In doubtful cases, the existence of these bursæ may throw light on the diagnosis.—*Med. Times and Gaz.*, September 16, 1882.

SYPHILIS AND ALCOHOL.—In a recent memoir published in *La France Médicale*, M. BARTHÉLEMY calls attention to the exceptional gravity of syphilitic skin eruptions in patients addicted to the habitual use or abuse of intoxicating liquors. The observations which he gives were all collected while the author was chef de clinique in Fournier's service, and relate exclusively to the waiter girls employed in "brasseries," who receive the name of "inviteuses," because it is their business to have as much liquor ordered as possible. In the pursuit of this métier, they are obliged to drink large quantities of intoxicating liquors; one of them absorbed in one day forty-two glasses of beer, five liqueurs, and one "grog Americain;" this, of course, was an exceptional case; but most are continually drinking, in order to incite customers to order for them. When these girls contract syphilis, every symptom, even the primary chancre, is of gravity. In one case the eruption did not disappear from the cutaneous and mucous surfaces for ten years. The chancre in one case spread and became as large as a silver dollar, and was surrounded with an extremely indurated border, and notwithstanding treatment, the chancre lasted three months. In another case (Obs. III) the chancres were still present when a generalized papulo-hypertrophic eruption appeared over the whole body.

It was remarked also that secondary and tertiary eruptions appeared much more rapidly, were of greater intensity, and of longer duration.—*Med. and Surg. Reporter*, September 2, 1882.

HYGIENE OF THE ELECTRIC LIGHT.—DR. SIEMENS, in his able address at the British Association, justly lays stress on the hygienic advantages of the electric light. He considers that the principal argument in its favor is furnished by its immunity from products of combustion, which not only heat the lighted apartments, but substitute carbonic acid and deleterious sulphur compounds for the oxygen upon which respiration depends. The electric light is white instead of yellow, and thus enables us to see pictures, furniture, and flowers as by daylight; it supports growing plants instead of poisoning them; and by its means we can carry on photography and many other industries at night as well as during the day. The objection frequently urged against the electric light, that it depends upon the continuous motion of steam or gas engines, which are liable to accidental stoppage, has been removed by the introduction into practical use of the secondary battery. This, although not embodying a new conception, has lately been greatly improved in power and constancy by Planté, Faure, Volckmar, Sellon, and others, and promises to accomplish for electricity what the gas-holder has done for the supply of gas and the accumulator for hydraulic transmission of power. It can no longer be a matter of reasonable doubt that electric lighting will take its place as a public illuminant, and that, even though its cost should be found greater than that of gas, it will be preferred for the lighting of drawing-rooms and dining-rooms, theatres and concert-rooms, museums, churches, warehouses, show-rooms, printing establishments, and factories, and also the cabins and engine-rooms of passenger steamers. The extreme brightness of the luminous parts is, however, dazzling and unpleasant.—*British Medical Journal*, September 2, 1882.

ATTENUATION OF VIRUS.—At the International Congress of Hygiene, recently held in Geneva, M. PASTEUR read a paper on this the most valuable outcome of his remarkable researches on chicken cholera. He showed that a virus, even when depending upon an organism, can, without any marked change in its general morphology, be so attenuated in its virulence as to produce germs in culture fluids which are capable of communicating only a transient malady robbed of the fatal dangers attending the access of the virus in its natural state.

This modification, or attenuation, of the virus is produced by its simple exposure to the oxygen of the air, and can be produced not only in the case of the virus of chicken cholera, but also in the case of splenic fever, and it is probable that future studies will still further extend the list of maladies which can be thus deprived of their dangers. M. Pasteur's communication is, however, mainly concerned with the application of this principle of attenuation to a new virus—that of hydrophobia. On the 10th of December, 1880, a patient, after having been bitten by a mad dog, died of hydrophobia in the Sainte Eugénie Hospital in Paris. Two rabbits inoculated with the buccal mucus of this case promptly died, and M. Pasteur was able to recognize the presence of a specific organism in their blood. This organism was capable of cultivation and, when inoculated in the blood of other rabbits, proved rapidly fatal. It was then found that while this poison was not harmful to adult guinea-pigs, it soon destroyed these animals when they were only a few days old, the virus at the same time greatly increasing in virulence as regards guinea-pigs, while it nearly lost its poisonous property for rabbits. Oxygen, also, in the case of this salivary virus, as in the virus of chicken cholera, is capable of producing attenuation of virulence, and rabbits inoculated with this harmless virus are able to resist the action of virus in which the original virulence has been retained.

The value of this method of attenuation of virus so as to produce a protective vaccine is even more firmly established by the discovery by Pasteur of still a fourth virus, that of the typhoid fever of the horse, which also can be rendered harmless.

It would seem, therefore, that in this method of attenuation we may hope to find a means of preventing disease as valuable as the discovery by Jenner, of the protective power of vaccinia.

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CONCUSSIONS OF THE SOLAR PLEXUS.

THERE are so many varied consequences that may follow an injury or contusion of the abdomen, the enclosed viscera are, comparatively speaking, so poorly protected, their serous covering is so extensive, their nervous and vascular supply so large, that such accidents are among the gravest which fall under the notice of the physician or surgeon. In the vast majority of cases, however, they produce their dangerous or fatal results in some well-understood manner; a rupture of the peritoneum or of the intestine, of the stomach, liver, or kidney; extravasation of blood into the peritoneal cavity; peritonitis and speedy death, summarizing perhaps the usual course of the graver class of cases. In milder instances, rupture of muscle, effusion of blood into the abdominal parietes, followed by hernia, by abscess or by sloughing, constitute a not infrequent series of symptoms. Or again, as in two cases reported in a recent issue of THE NEWS, a circumscribed peritonitis may occur and run a favorable course, terminating in recovery.

None of these, however, have the medico-legal interest and importance which belong to those cases in which death follows immediately upon the receipt of an abdominal injury, and yet in which careful post-mortem examination fails to reveal the slightest evidence of traumatic or other changes. There is certainly a wide-spread belief, both within and without the profession, that death does result from such blows, through their effect in some mysterious way upon the solar plexus and its numerous branches, and yet we are compelled to admit, after a careful survey of the literature of the subject, that no well-authenticated instance of the kind has yet been recorded, unless we except the one reported in our present number by Dr. Beach. Those contained in the various works on Medical Jurisprudence are, without exception, either so carelessly reported or devoid of pathological detail as to fail to carry conviction, or else, as in the cases of Mr. Wood, quoted by most of these authorities, there were lesions discovered sufficient in themselves to produce death.

It could not, of course, be denied, that in an individual with a weak heart, with fatty walls, or with insufficient valves; with atheroma of the cerebral bloodvessels; or with advanced structural changes in any important viscera, an abdominal contusion, with the sudden gasping for breath, the rapidly increased vascular tension produced by it, and the subsequent condition of exhaustion might precipitate a fatal result which would otherwise have been delayed. In such cases, however, an autopsy would disclose the underlying pathological condition. In the absence of any such antecedent disease, and of any evidence of structural injury from the blow itself, it is a very serious matter to pronounce upon the cause of death, especially when, as in the case in question, the life or liberty of a fellow-being depends upon the medical opinion.

While it may be conceded that, in a certain number of instances, no other explanation appears to offer, it must at the same time be remembered that our methods of investigating pathological processes are not yet so exact as to detect with certainty all possible causes of death, and that it is our professional duty, above all in medico-legal cases, to state with positiveness only that about which there can be no reasonable doubt.

We can however say that the most probable explanation as to the mode of production of sudden death in these cases of blows on the epigastrium, as well as when caused by the drinking of large amounts of cold water, is to be found in the classical experiment with which the name of Goltz is connected (klopfversuch). It is found that when the pleuro-peritoneal cavity of a frog is opened and the surface of the intestine smartly tapped, after a few moments the heart is arrested in diastole. If, however, the mesenteric nerves, the ganglionic cords on each side of the aorta, the spinal cord below the medulla, or the vagi nerves are divided, no such effect is produced, thus proving that the arrest of the heart is due to reflex stimulation of the cardio-inhibitory centres in the medulla, the afferent fibres passing through the mesenteric nerves and sympathetic while the efferent impulses pass through the pneumogastric. Bernstein has also shown that the same effect will follow electric stimulation of these nerves.

Though the same general conditions hold in mammals, its demonstration is a matter of much greater difficulty. Asp has, however, been able to produce reduction in the rate of pulsation by stimulation of the central end of the splanchnic nerves; from analogy, therefore, the same *modus operandi* may with safety be concluded to hold.

The nerves of the abdominal cavity are not the sole paths through which the reflex inhibition of the heart may be produced. Thus in rabbits, the heart is arrested in diastole when the animal is caused to inhale the vapor of ammonia, the efferent path in this case lying in the fifth pair of nerves; and it is probable also that the sudden arrest of the heart in chloroform inhalation may be produced in the same manner; while in the frog, crushing the foot with a blow is often capable to stopping the heart.

In ourselves, fainting from pain is doubtless produced in the same manner, through reflex inhibition of the heart.

As regards the dangerous effects produced by the drinking of ice water in large amounts, when in a condition of exhaustion, we recall one instance where loss of consciousness and extreme slowing of the heart were produced by the ingestion of ice water during a long swimming match; and the trainer, who was ignorant of these physiological principles, was charged with poisoning his man.

DRUGGISTS AS VENEREAL SPECIALISTS.

THE various evils to the profession and to the community arising from the wide-spread practice of "counter-prescribing," have been repeatedly set forth in medical and lay writings, and are, indeed, so obvious that, as a rule, they require no explanation. There is one class of patients, however, who are pre-eminently the victims of this unlawful custom, and whose sufferings do not fall under the notice of the public, or even of the profession at large.

The young men among the poorer and middle classes who contract some form of venereal disease, constitute a very large percentage of the whole number, and among them there are few who do not, at least at first, apply to some apothecary for relief. The reasons for this are to be found in their limited means which often do not permit them to pay a physician; in their inability to spare the time from their work to attend at a dispensary service; and in their natural dislike to confide in the family doctor, or in their older and more experienced friends. Under these circumstances they seek a prescribing druggist—who is only too easily found—and ask for something which will cure their ailment. The routine practice, and we speak after a large experience with such cases, is that the patient names what he believes to be the disease with which he is affected, and that this is almost or quite all the information which is imparted to the druggist, who then proceeds to hand out the particular mixture which constitutes *his* remedy for that malady. As such patients are usually suffering for the first time, are ignorant of all technicalities, and often, unconsciously reverting to first principles, include under the generic term of "pox," all the varieties and complications of gonorrhœa, chancroid, and syphilis, it can readily be understood that no small amount of evil results from this procedure. A catalogue of the gross and altogether inexcusable blunders, which in hospital, dispensary, and private practice, have fallen under the notice of one or two physicans in this city during the past twelve months, would be quite sufficient to demonstrate the importance of the matter, and we are glad to learn that an effort is being made to obtain the evidence in such shape as to warrant its publication with names and addresses.

Apart from the unnecessary suffering to the individual, which moralists might assert to be a benefit in disguise, the harm and danger to the community are not to be disregarded. Such patients, unwarned and unenlightened, are but too often the accidental means of extending these diseases to innocent and equally uninformed people, and sometimes to whole families. It is impossible to estimate the injury which has thus needlessly been inflicted upon, first, the patients themselves; next, their immediate relatives or friends; and, finally, upon an undefined and extensive outside circle.

We are cognizant of cases where the most serious complications of gonorrhœa have been developed, and the patient's life imperilled by this form of malpractice; we know of one where syphilis was allowed to progress to the production of ulcerative lesions, followed by ineradicable deformity, while the patient was being treated with urethral injections; we have seen several—a large number—in which unrelieved phimosis and balanitis, treated with pastes and emulsions of copaiba, have gone on to partial destruction of the affected organ; one in which a specific iritis destroyed sight, and another, in which retention of urine from old stricture, almost killed the patient, no examination of any sort having been made in either instance, and the treatment in both being directed to lesions which did not exist. Such cases come under the notice of every one connected with a venereal dispensary or hospital ward, and in numbers which warrant our calling the attention of the profession to the subject. We are convinced that the only course which will result in an abolition of this outrageous form of swindling is one which aims at publicity, and we shall shortly have more to say in regard to the best means and methods of attaining this end.

DR. REITER'S REMEDY FOR INVETERATE PSORIASIS.

In that eccentric, but interesting periodical, Squibb's *Ephemeris*, we find a letter from Dr. Reiter, of Pittsburg, giving an account of a remedy for psoriasis, which he had used successfully *in propria persona*, and in many other cases. Any one having experience with inherited, or long-standing psoriasis, will admit the obstinacy with which it resists the action of remedies. Arsenic, at the present time, is the remedy most esteemed in its treatment. Dr. Reiter himself a sufferer to an aggravated extent, and inheriting his malady from several generations of sufferers, was finally cured by a tincture of burdock seed, recommended to him by an old farmer. The suggestion of the farmer was unconsciously based on the old therapeutical maxim—a remedy which has cured a case of disease, must also cure analogous cases. The precept proved to be sound in this instance, for the farmer's remedy having cured his own case was equally successful in Doctor Reiter's case. The official designation of burdock is *Lappa*, and it is borne on the secondary list of the pharmacopœia of 1870. The seeds are employed by Dr. Reiter in the form of a saturated tincture. Dr. Squibb in commenting on this preparation, suggests that a tincture be prepared in the proportion of two ounces of the crushed seeds to a pint of good whiskey, of which four fluiddrachms are given, well diluted, three times a day, after meals. Experience has shown that the remedy must be faithfully administered for a long time—for many months if necessary, in the more inveterate cases. The digestive functions, and the skin, are much improved by the remedy. The only constituents to which the curative results can be referred are an essential oil and a resin.

We find that burdock has long been used as a remedy in chronic skin affections, in strumous and rheumatic diseases. That it should have been kept on the U. S. Secondary List, is proof that its virtues are not highly esteemed. It has been relegated to domestic practice. If, however, it can be shown to cure cases of psoriasis of long standing, it deserves a more prominent place.

THE TREATMENT OF DIPHTHERIA BY LARGE DOSES OF CALOMEL.

There have always been advocates of this practice. In the letter of Dr. Reiter, communicating to Dr. Squibb his experience of the use of burdock, and published in the *Ephemeris*, we find the calomel treatment of diphtheria strongly supported. Since Dr. Squibb endorses Dr. Reiter as a practitioner of experience, and of good judgment, we must give his suggestions respectful consideration. Whilst we may profit by his practical therapeutical experience, we need not adopt his pathological views. Dr. Reiter says: "I have this winter verified my discovery perfectly. *Diphtheria is a functional disease of the liver.* . . Here you have the remote cause—*inspissated* blood. . . The proximate cause—*too much fibrine in the blood.*" The treatment —for the justification of which, we fear, the theory was invented—consists in the administration of calomel—one scruple the first dose, and then ten grains every hour until the symptoms improve, the fever subsides, the exudation stops spreading, and is detaching, etc. Says the old Doctor:

"Dear Squibb, smoke that in your meditative pipe—a boy of eight years with a half-ounce of calomel in his *prima viæ, not prostrated*, but *restored.* Trousseau is the only medical writer I know of who has not only seen, but has most accurately described all the protean forms of this most fatal malady—and not one of them escapes a clear and rational explanation by my etiology. I have read again and again his most graphic articles on diphtheria, and it pains me to observe how he staggers in trying to reduce his notions to a rational philosophy, lacking the light of a sound etiology."

Dr. Reiter argues in this circle: diphtheria is a disease in which the "power of destroying fibrine," ordinarily possessed by the liver, is lost, and hence the deposits in the throat. To cure such a disease, this function of the liver must be restored, and as calomel possesses this property, it must cure this disease. "Where a case has not reached a fatal condition," says Dr. Reiter, "from twenty-four to forty hours' medication effects a cure." We may not agree with the pathology; but what shall we do with the facts? If it be true that so large a proportion of the cases of diphtheria yield so soon to this treatment, we must admit that there is truth in the treatment, even if we deny the relevancy of the explanation. Further experience with a large number of unquestionable cases of diphtheria is necessary to establish in any, the exact value of the calomel treatment.

THE INDEX CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE.

We have just received the third volume of this extraordinary work. The whole medical world is debtor to Dr. Billings for his wise forethought and wide views. We have so often commended it and so often urged its support by liberal Congressional appropriations, that it is but iteration to express any opinion. Not only has no such work ever been attempted before, but probably none ever will be again, for a century at least, for this work is monumental and complete. It is indispensable for every medical writer and investigator.

The present volume consists of 1,020 pages quarto, with over 9,000 author titles and nearly 9,000 sub-

ject titles. It contains also over 4,000 titles of medical portraits, a feature in which this library excels all others, so far as we know. The volume extends from Cholecyanin to Dzondi.

The three volumes thus far published contain nearly 31,000 author titles, and over 129,000 subject titles. The mere enumeration of these figures prove the justice of the adjective we have used—monumental.

We regret that the appropriation is so small that the number of copies of Volume III. which it permitted to be printed is much less than that of the preceding volumes. We are informed, however, that the Government Printer has on hand a few extra copies which can be purchased at the nominal price of two dollars per volume. Persons who are so unfortunate as to be unable to procure copies would do well to apply for them to their representatives in Congress who would thus be informed of the extent of the demand for these volumes among their constituents in the profession, and be prepared to vote accordingly at the next session, when a bill will probably be introduced to publish an additional number of copies of this work for distribution by members of Congress.

We trust that the profession generally will use its influence in favor of a liberal appropriation for subsequent volumes.

IT is proper at this time to call attention to another book, published in London—Dr. Neale's *Medical Digest*—which has a somewhat similar design to that of the Index Catalogue, but is constructed on a widely different plan. The second edition is just published and it will be a most useful companion to every writer and student. It is an octavo of over 700 pages with a very full and complete index. The Digest is not an index to all medical literature, or to a given set of journals, but a selected index as its name implies. It contains about 120,000 entries of articles, classified under proper headings, gathered from eleven of the leading British medical journals of the last forty years, and the *American Journal of the Medical Sciences*, as the representative of American medical journalism. Few men, writers, students, or simple practitioners, but will find in it a mine of wealth. Any one who will use it merely as a means of reading on his cases, whether for writing or for self-improvement will soon discover its great value.

WHOLESALE HUSBAND-POISONING.

INSURANCE companies, it is well known, as a rule will not insure wives for the benefit of their husbands, since wife-murder in various forms is so often resorted to, even in the absence of any such pecuniary stimulus. Not long since, however, we were startled by a despatch in our morning papers to the effect that over one hundred husbands in Hungary had been successfully, not to say happily, despatched by their enterprising wives. The Vienna correspondent of the *London Standard* (according to the *Tribune*) gives the details of this most remarkable of crimes.

In the little village of Melencze lived a certain old hag, Thekla Popov, who had reached the scriptural limit of three score and ten years, but who lacked the virtues pertaining either to her age or her sex. She figured as the "Married Woman's Best Friend," and justified her title to those who wished to complete the cycle of maid and wife by a speedy widowhood. She concocted her poisons and conducted her business so skilfully that for a long time no suspicion fell upon her in spite of the fact that her fame as a vendor of such elixirs must have been known to many a voluble woman, and the drugs must have been used again and again in most cases, lest a too sudden despatch of the unfortunate victims should betray her. Wronged maidens sometimes obtained her medicines, but wives, especially if young and comely, were her chief and most desired patrons. The cost, in view of the risk, was very moderate. Twenty-five to fifty dollars was the usual fee. On the average, husbands, even with an active market, only fetched thirty-five dollars. Her daughter, who was her only confederate, finally quarrelled with her and exposed her horrible practices, and the exhumation of the bodies of her victims confirmed the story. So far as we know, the practices of this Hungarian gypsy have been confined to her own village.

LESIONS OF THE ISLAND OF REIL.

IN the subjects of aphasia, the lesions are not often limited to Broca's convolution, but also involve the island of Reil. The observations proving this have been made by Charcot, Meynert, Lépine, and others. The function of the insula has been lately studied by DR. PERDRIER, experimentally and clinically. He finds that destruction of the insula in animals does not affect motility or sensibility, but that it is a psychical centre, purely. In three examples in man of lesions of the insula absolutely limited to this area, there was hemiplegia, in which the arm was more decidedly affected than the leg. The paralysis of motion is complete, and there are no contractures or disorders of sensibility. The muscles of the trunk and of the face are not affected.

TREATMENT OF MENIERE'S DISEASE.

DR. NAKACHIAN has brought forward a number of new cases in illustration of the good effects of quinia in Ménière's disease, as originally shown by Charcot. The quinia is given in doses of 60 to 80

centigrammes (10 to 14 grains) per day for fifteen or twenty days. Then an interval of the same duration as the treatment is allowed, and the administration of the quinia is again resumed in the same way as at first. There are two or three or more of such periods of treatment, with the intervals of respite. During the administration of the remedy, the symptoms of the disease—the noises in the head and the vertigo—are increased; but during the interval a marked improvement is observed, each time greater. Recently Charcot has tried salicylate of sodium, and it is found to have the same effect as quinia. Probably other remedies producing tinnitus and vertigo will have some curative influence, the disturbance caused by the remedy supplanting that caused by the morbid process.

REVIEWS.

L'Instrument de Molière, traduction du Traité de Clysteribus de Regnier de Graaf (1668).

The Instrument of Molière, a translation of the Treatise on Clysters, by De Graaf. 8vo. pp. 127. Paris: Morgand & Fatout, 1878.

The French are a queer folk in many things. The syringe plays a not unimportant *rôle* in the family, literary, and dramatic life of our Gallic neighbors. No bride considers her *trousseau* complete without it; it figures largely in literature; and we remember to have seen on the stage of the Châtelet Theatre, in the "Sept Chateaux du Diable," one of the oddest scenes we ever witnessed. The gourmand, having over-eaten, called the doctor, who had barely closed the door, when there entered a procession of boys and men, beginning with a very small boy and ending with a very tall man, every one of whom, to the number of fifty or sixty, bore a syringe, likewise graded from the smallest size made to some big tin ones from eight or ten feet long. The terror of the patient, who fled in dismay before the agents of such decided medication and was followed in all his intricate doublings by his snake-like column of pursuers, was the source of unbounded merriment to the audience, in which women largely predominated. Louis XIV. gave more frequent audience to his Enema-Ministers than to his Ministers of State; the *Malade imaginaire* comforted himself after the fashion of the grand monarch, with clysters emollient, purgative, astringent, anodyne, detersive, carminative, refreshing, consolidating, or nourishing, according to necessity or whim. Molière so often introduced the instrument in his comedies that our translator ventures on a new caption to De Graaf's treatise, derived from the great satirist, and he describes the seventeenth century as "the age of clysters and of perruques."

De Graaf's treatise is at once instructive and amusing. With Plutarch, Pliny, and Galen, he traces the origin of the clyster to the Egyptian Ibis, which, when "incommoded by an excess of noxious humors, fills its bill with sea-water, introduces it into the intestine, which it sprinkles abundantly in order to start on its path the annoying burden." The polypharmacy which characterized the disgusting messes to be swallowed, was no less marked, though far less repulsive, in the enemata, many of them counting scores of various medicaments. For nourishing enemata, upon which he casts a rather doubtful eye, he commends wine, milk, bouillon, eggs, etc., which should be injected with sufficient force to pass the large and reach the small intestine, though he doubts the possibility of its passing in ordinary circumstances the ileo-cæcal valve, that "barrier of the apothecaries" or "pharmaceutical columns of Hercules," as were its amusing and significant titles in that "age of clysters." Some subtile portion of the clyster he thinks might traverse the pores of the bowel, enter the blood, give temporary vigor to the heart, but would give no veritable nourishment; and he instances Democritus who, at the age of 109, when death was under his roof, kept him at bay for three whole days by the mere odor of hot bread [toast?] so that he might survive the pending *fête* of Ceres, lest his sister could not make her proper devotions to the Goddess.

In one chapter, we find that the antiquity of the suppository is proved by an allusion to it as a usual remedy: and also a very circumstantial account of one, which being introduced into the rectum, in the time one could say a *Pater Noster* and an *Ave Maria*, passed upwards to the stomach and was vomited. In truth the very name of suppository is derived from the fact that it supplanted (supponere) clysters.

De Graaf also devised a special syringe with a flexible tube, to make which he used at first a bird's intestine, but afterwards leather, either of them a poor substitute for our modern rubber tubing. A modification of this tubing also served him for direct transfusion of blood. For this purpose he proposed the bird's intestine, terminated at each end by a quill for insertion into the bloodvessels. Verily, there is nothing new under the sun!

The present edition is beautifully printed, and is ornamented with sundry little tail-pieces appropriate to the subject, chiefly the syringe, the bed-pan, and the *pot de chambre* not infrequently in use by little winged cherubs; but in one instance, a little Cupid, hastening towards the too-distant vessel is evidently in the greatest danger of a lamentable accident from vesical overflow—the less threatening, however, since he has no clothing to speak of, the injury to which could excite maternal wrath.

CORRESPONDENCE.

A PLEA FOR BLOODLETTING.

To the Editor of The Medical News.

Dear Sir: Amongst the editorials in The News for September 16, in reference to "the Treatment of Acute Sthenic Pleurisy," I notice the query: "In view of the above, may we not inquire if it has been wise to abandon venesection altogether in cases of acute sthenic pleurisy? Have not effusions, serous and purulent, been more frequent and extensive since venesection has not been employed?"

So far as my observation and experience extend, I am prepared most decidedly to answer the latter in the affirmative. To my mind, the inquiry is opportune. The inquiry should be generally circulated throughout the profession: "Have we acted wisely and honestly in altogether abandoning general bloodletting, not only in the treatment of acute pleurisy, but in many other diseases assuming a like sthenic aspect?"

When I entered upon my professional labors, a physician was regarded as deficient in his *armamentarium* without lancet and cupping instruments. But the adage, "Better be out of the world than out of fashion," has shown its full force when applied to the medical profession in this particular. Fifty years ago, about the time of my pupilage, bloodletting was the panacea of the age; its use was not confined to the medical man, but the 'squire, blacksmith, etc., were prepared to bleed in emergencies!

It is not surprising, therefore, that venesection, under such circumstances so indiscriminately used by those too altogether ignorant of the laws of health or disease, should have fallen into disrepute, but it does not logically follow that it should be consigned to a grave among the "lost arts."

I have in mind a number of instances, coming within the compass of my own observation, of cases contemplated in the query. While practising in Oskaloosa, Iowa, some twelve or more years ago, pleurisy, pneumonia, and pleuro-pneumonia were quite prevalent in that locality. Many were treated by physicians who, according to "fashion" had discarded bloodletting as a therapeutic agent altogether, some of whom, particularly those of the younger members, had never witnessed phlebotomy. These cases generally progressed slowly, attended often with alarming sequels—sometimes necessitating paracentesis—others were treated from the onset, energetically by bleeding, either general or topical, or both; not a single case thus treated, to my knowledge, was followed by those distressing conditions. The contrast was very marked. Subsequent experience and observation have served to establish and confirm my conviction, that in the neglect of this therapeutic agent physicians often fail to give their patients the best means of relief and recovery. Respectfully,

J. P. GRUWELL.

SALEM, O., September 28, 1882.

POISONING BY BOSCHEE'S GERMAN SYRUP.

To the Editor of THE MEDICAL NEWS.

SIR: The following case may be of interest to the profession. A short time ago, I visited a patient at about 10 A.M., and while examining him, my attention was called to an infant three weeks old, whom the mother said was dying. Upon hasty examination and inquiry, I was at a loss to account for its alarming condition; but being struck by its marked cyanotic appearance, slow respiration—three or four a minute—contracted pupils, responding sluggishly and feebly to light, and pulselessness, I asked the mother if she had given it anything. She replied that on the afternoon of the previous day she gave it three or four drops of Boschee's German Syrup for a "slight cold" it had had for a day or two. This statement of the mother at once threw a flood of light upon the case, as the symptoms were undoubtedly those of opium poisoning. The alarming symptoms came on about an hour after the administration of the syrup, and had continued ever since. The child had always enjoyed good health, excepting the "slight cold" already referred to. There was no discoverable pulmonary or bronchial lesion. Atropia and stimulants produced a slight but transient improvement in the symptoms, and the child died in a few hours, about thirty after the administration of the syrup. Respectfully,

H. C. SHUTTEE.

WEST PLAINS, MO., September 12, 1882.

NEWS ITEMS.

MISSISSIPPI INSPECTION SERVICE.—This service, which was instituted for the season by the National Board of Health in May last, was discontinued on September 30th. It consisted of a supervisor in New Orleans, whose duty it was to investigate and report upon suspicious cases of fever occurring in the city, and to announce the presence of yellow fever immediately on its recognition. The Board of Health of Louisiana pledged itself to afford this officer facilities for the performance of his duty. The dread with which yellow fever is regarded in the Mississippi valley is such that even a rumor of the disease in New Orleans is followed by depression and relaxation of business interests. The suppression of false alarms was a material gain to commerce, and was recognized by the State Board, although it is said that in a suspicious case which was investigated on September 12th, it failed to redeem its pledge to the supervisor of the National Board. While commercial interests, on the one hand, derived benefit from the presence of this officer, neighboring States looked to him for a notification of the existence of real danger. Under his supervision inspections of freight on river-boats and railroads were carried on, the certificate of inspection being to the trains what a clean bill of health is to a vessel arriving from a foreign port. It permitted immediate entrance to what would otherwise have been quarantined. The railroad companies so appreciated the value of this system of inspection as subserving their interests while acting as a guard to the people of other States that the expenses incurred were voluntarily borne by them. Vessels leaving New Orleans for ports above were inspected on the request of the master or owner, and certificates furnished of freedom from disease. These were accepted by local boards, and commerce was uninterrupted. When a vessel sailed without a certificate she became subject to the quarantine laws of the place of her destination. At Vicksburg and Memphis, by request of the local authorities, inspection stations were established to intercept vessels without certificates and verify the condition of those which passed them. This system of guard and pass-port enabled the people of the great Valley to pass the summer with a feeling of security.

THE YELLOW FEVER.—The epidemic in Pensacola appears to have reached its height, as there has been, during the week, no daily increase, as heretofore, in the number of cases. Up to and including September 25, there had been recorded 517 cases and 54 deaths. There were on

Dates.	Cases.	Deaths.
September 26th, . . .	60	2
" 27th, . . .	60	6
" 28th, . . .	42	2
" 29th, . . .	52	11
" 30th, . . .	53	3
October 1st, . . .	45	4
" 2d, . . .	46	5
Total, . . .	875	87

The ten-per-cent. death-rate is somewhat heavier than that recorded in Brownsville; but an elimination, if such were possible, of the simple malarial cases which undoubtedly swelled the yellow-fever lists in the latter city, would probably show that the disease has not been more fatal in one locality than in the other.

VACCINATION OF SCHOOL CHILDREN.—Dr. JOHN H. RAUCH, Secretary of the Illinois State Board of Health, has just issued a circular to County Superintendents, School Boards and Teachers, in which he calls attention to the fact that communications received since the beginning of the present school year, indicate the necessity for renewed instructions concerning the School Vaccination Order of the State Board of Health, promulgated in December, 1881.

The order has been complied with to a very gratifying extent. Its wisdom and utility have been demonstrated by the facts—

First.—That among the thousands of cases of smallpox which have occurred in the State since the order was issued, not one is reported of a public scholar who had been properly or recently vaccinated. Several cases, however, with a large proportion of deaths,

have occurred among scholars who had either not been vaccinated at all or not since infancy.

Second.—That in no instance where the order was thoroughly enforced has it been necessary to close the public schools, even when smallpox existed in a community. On the other hand, schools have been broken up and studies interrupted in a number of instances where—as shown by the returns in this office—the order had been neglected.

In some of these latter cases the failure to enforce the order was due to causes which no longer exist. The present is a very favorable season of the year in which to vaccinate. Good vaccine matter can be readily procured, and the operation is not now liable to be complicated by the results which obtain in cold and changeable weather.

Concerning the statements sometimes met with—of serious results from vaccination, loss of arms, and even death—the Secretary takes occasion to say that he has made it his personal duty to investigate every report of the kind which has come to his knowledge. The net result of such investigations is that not one such report has been substantiated. He has been wholly unable to find any evidence of a death caused by vaccination, in this State, or even of permanent injury or serious illness, due to the operation alone. He does know, however, of hundreds of deaths—aside from the suffering, the loss of sight, and the disfigured faces among survivors—caused by the neglect of vaccination.

An examination of the reports thus far received shows that more than two-thirds of the total school population of Illinois, were unprotected against smallpox on the 1st of December, 1881.

Of the two million vaccinations within the past eighteen months, over thirteen hundred thousand have been performed since the 1st of January, 1882, as the result mainly of this vaccination order, and of similar measures instituted by the State and local Boards of Health. Until these measures were fairly under way there was a steady increase of the smallpox—but coincidently with their successful operation came the decline of the disease, until now it is practically at an end in Illinois.

It remains now to perfect and perpetuate the results thus far accomplished, and to this end—so far as the public schools are concerned—the following instructions are issued with reference to the School Vaccination Order:

At the beginning of the school year teachers must satisfy themselves of the vaccinal status of each of their scholars.

Proper vaccinal protection means a successful vaccination in a child not yet arrived at the age of puberty; or, if beyond that age, a successful vaccination or revaccination, as the case may be, performed within the past two years (approximately).

Vaccination returns, accounting for every child whose name appears on the school schedule, must be forwarded to the office of the Secretary of the State Board of Health at the end of the second month of the school year.

SEMI-CENTENNIAL ANNIVERSARY OF MCGILL UNIVERSITY.—The medical faculty of McGill University celebrated its fifteenth anniversary on October 5, 1882.

TROUBLE IN THE MEDICAL COLLEGE OF VIRGINIA, RICHMOND.—Governor Cameron, of Virginia, a few days ago appointed a new Board of Visitors for the Medical College of Virginia, in Richmond, thereby summarily displacing the old board, which action created considerable excitement in medical circles. The old board, however, upon legal advice determined to hold on, claiming that the Governor under the law had no right to remove them; that he could only fill vacancies, and that no vacancies existed. On Friday, September 29, we learn from an Associated Press dispatch, after being commissioned, the new board proceeded to the medical college for the purpose of meeting and organizing, but they were denied admittance to the building by Dr. J. B. McCaw, dean of the faculty, who refused to recognize their right or authority. They therefore held a meeting in the college yard and elected Lieutenant-Governor John F. Lewis president, and Dr. Lewis Wheat, secretary. The demand for admittance was renewed and insisted upon by President Lewis, when the policemen who were present, at the instance of the faculty, took him into custody and proceeded to the first police station, accompanied by the remaining members of the new board. When the parties were brought before the Chief of Police no one appeared against them and he promptly dismissed the matter, as there had been no violence or breach of the peace.

The board then went to Ford's Hotel, where, after a few minutes of informal conference, it adjourned until 4 P.M., at which hour it reassembled. After an interchange of opinions, the desire seemed general to temporize and overlook the indignity offered the board, in view of the public good resulting from the full operation of the college in all its departments. Expressions of opinion indicated also a desire to divest the matter of all political significance as far as possible. A committee was appointed to lay the matter before the Governor, and the board then went into secret session. Upon the return of the committee from the Governor it submitted a preamble setting forth the occurrences, together with a resolution notifying each member of the faculty of the Medical College of Virginia that the board would proceed to consider whether each of them—the faculty—shall not for his participation in the illegal proceedings above mentioned be removed from his position as professor in said college. The resolution was adopted and the board adjourned to meet the following day.

On September 30, the new Board transacted business as if it had full possession of the College. Committees were appointed to take a full inventory of the College property, and to report a plan for the reorganization of all its departments. A resolution was discussed looking to a suit against the city of Richmond for damages for the false imprisonment of the President of the Board, Lieutenant-Governor Lewis.

THE SENEY METHODIST EPISCOPAL HOSPITAL IN BROOKLYN.—The corner-stone of this hospital, to which attention has already been called (see THE MEDICAL NEWS for March 11, 1882, p. 280), was laid on Wednesday, September 20th, with appropriate ceremonies. Dr. L. S. Pilcher, of the Building Committe, delivered an address on the occasion, from which we make the following extract:

"The evils of hospitals have been traced to five sources, overcrowding, defective ventilation, defective sewerage, uncleanliness, and failure to destroy the special poisons produced in the bodies of the sick. The last two sources become subjects to be provided against in the administration of a hospital, but the first three are to be the controlling ideas to be considered in its construction.

"Whoever undertakes to build a hospital has, therefore, a responsibility, which he cannot decline, to secure in its construction every possible safeguard against these sources of evil. Every hospital committee should be summoned before the bar of public opinion, and their work tried by the tests of hospital hygiene that modern science has established. In the old republic of Rome, when the interests of the State were commit-

ted to the care of the consuls, the charge that was given them was, 'Let the Consuls look to it, that no harm befalls the State.' In our modern republic, when the interests of the sick are to be committed to the authorities of an hospital, a similar charge might well be incorporated into every hospital charter. The hospital professes to do good; let it managers look to it that no harm befall its inmates!

"This reponsibility has been deeply appreciated by the committee to whom the duty of elaborating the plans of this hospital has been assigned, and particularly by the medical members of the committee, whose judgment and wish, in every particular, have been regarded in the plans of the hospital. It give us pleasure to publicly testify to this fact, and especially to acknowledge the willingness and ability which the architect of the hospital has shown in carrying out our suggestions.

"The central thought which has run through all the plans has been that of *isolation*. Each building is isolated, each room in each building is isolated, and, to a very great extent, each bed in each room is isolated. No ward will contain more than twenty-four beds, and there will be no bed upon which the direct rays of the sun may not fall at some time during the day. Every bed will enjoy at least 1,800 cubic feet of air-space, and not less than 4,800 cubic feet of fresh air will be supplied each hour to every bed, while the temperature of the air-supply will be under the control of the occupants of a room or ward; the amount of air supplied will be constant and beyond the possibility of being interfered with. The systems of fresh-air supply and foul-air removal for each ward are entirely independent of any other ward, and no one will be able to pass from one ward to another, even when the wards are in the same building, without first going into the open air. Perfect isolation, and insulation and ventilation of the water-closets has been provided for. As the sick are isolated from each other, so the well are to be isolated from the sick. The apartments for the attendants, when not on duty, and for the resident physicians, are isolated and ventilated with equal care.

"This is neither the time nor the place to enter upon the details of the plans which have been elaborated. The hospital, when completed, will afford generous accommodations for over 200 beds.

"This building, the corner-stone of which we are assembled to lay, is the central building of the group of buildings which are to constitute the hospital. In addition to the usual administrative offices and quarters for the officers of the hospital, it will contain a special ward of ten beds, and eleven private rooms, with accommodations for twenty-five beds. On its upper floor will be dormitories for the corps of nurses, and in the wing upon its eastern side are the chapel, museum, and library-rooms. In a separate building in the rear will be placed the steam-boilers, the laundry, the bakery, the kitchen, the apothecaries' department, and the servants' dormitories. On either side of the central buildings will be aligned the pavilions in which the common wards will be placed, four in all, the two nearest the central building containing two stories of wards; the one to the extreme west one story; that to the extreme east two stories, and to be especially modified to adapt it for a children's hospital. The nearest proximity of any of these pavilions of wards to one another will exceed 120 feet. Separate buildings will be provided for the surgical operating theatre, and for the mortuary.

"The institution, the character of whose buildings I have now outlined, will lack nothing in the scope of its design, the comprehensiveness of its details, and the perfection of its finish, to make it the complete embodiment of the Christ-given idea of relief to the suffering. It will be unexcelled in point of architectural beauty by any similar institution in this or any country. It will be free from the reproach of hospitalism, and will afford every facility for the cure of disease and the advancement of scientific medical knowledge. To all men alike who are sick and in need will its privileges be extended. Its crowning glory will be that, in all its ministrations and offices, it will name the name of Christ. In the laying of this corner-stone those who have for many months been carefully considering and maturing the plans for this great institution may well feel a special exultation, and be pardoned for expressing it. This act marks the beginning of the end, when of all these stones each shall have found its place, and when the completed structure, a perfect hospital, a true Hotel Dieu, shall stand forth, a magnificent example of Christian benevolence, a monument which shall render imperishable the name of the man whose munificence has built it, and which shall likewise forever testify to the world the charity of the Church which gave him birth, and to whose care he has committed the management of such a trust."

PERSONAL.—Prof. Wm. B. Carpenter, the well-known physiologist, and Dr. Morell Mackenzie, were present at the opening of the medical courses at the University of Pennsylvania and Jefferson Medical College, in this city.

HEALTH IN MICHIGAN.—Reports to the State Board of Health, for the week ending September 23, 1882, indicate that influenza has increased, that cholera morbus has considerably decreased, and that neuralgia, dysentery, cholera infantum, diarrhœa, diphtheria, whooping-cough, and intermittent fever have decreased in area of prevalence.

Including reports by regular observers and by others, diphtheria was reported present during the week ending September 23, and since, at 21 places, scarlet fever at 8 places, measles at 1 place. Smallpox was not reported from any locality in Michigan.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT, U. S. ARMY, FROM SEPTEMBER 25 TO OCTOBER 2, 1882.

MIDDLETON, P., *Assistant Surgeon.*—Granted leave of absence for one month, on surgeon's certificate of disability, with permission to go beyond limits of the department.—*S. O. 103, Department of Texas, September 20, 1882.*

CARTER, W. F., *Assistant Surgeon.*—Relieved from duty at Fort Concho, Texas, to report to Commanding Officer at Fort Stockton, Texas, for temporary duty as Post Surgeon.—*S. O. 103, Department of Texas, September 20, 1882.*

POWELL, J. L., *Assistant Surgeon.*—To report to headquarters Department of Texas, to temporarily relieve Assistant Surgeon P. Middleton as Post Surgeon and Attending Surgeon at Department Headquarters.—*S. O. 103, Department of Texas, September 20, 1882.*

SHUFELDT, R. W., *Captain and Assistant Surgeon.*—To proceed to Jackson Barracks, New Orleans, La., and report to the Commanding Officer thereat for duty.—*S. O. 93, Department of the South, September 26, 1882.*

POWELL, J. L., *Assistant Surgeon.*—Relieved from duty at Fort Stockton, Texas, and to report at headquarters Department of Texas, for temporary duty as Post Surgeon, San Antonio, Texas, and Attending Surgeon at Department Headquarters.—*S. O. 103, Department of Texas, September 29, 1882.*

THE MEDICAL NEWS *will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.*

Local papers containing reports or news items should be marked.

Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS *should be addressed to No. 1004 Walnut Street, Philadelphia.*